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APRIL 1985

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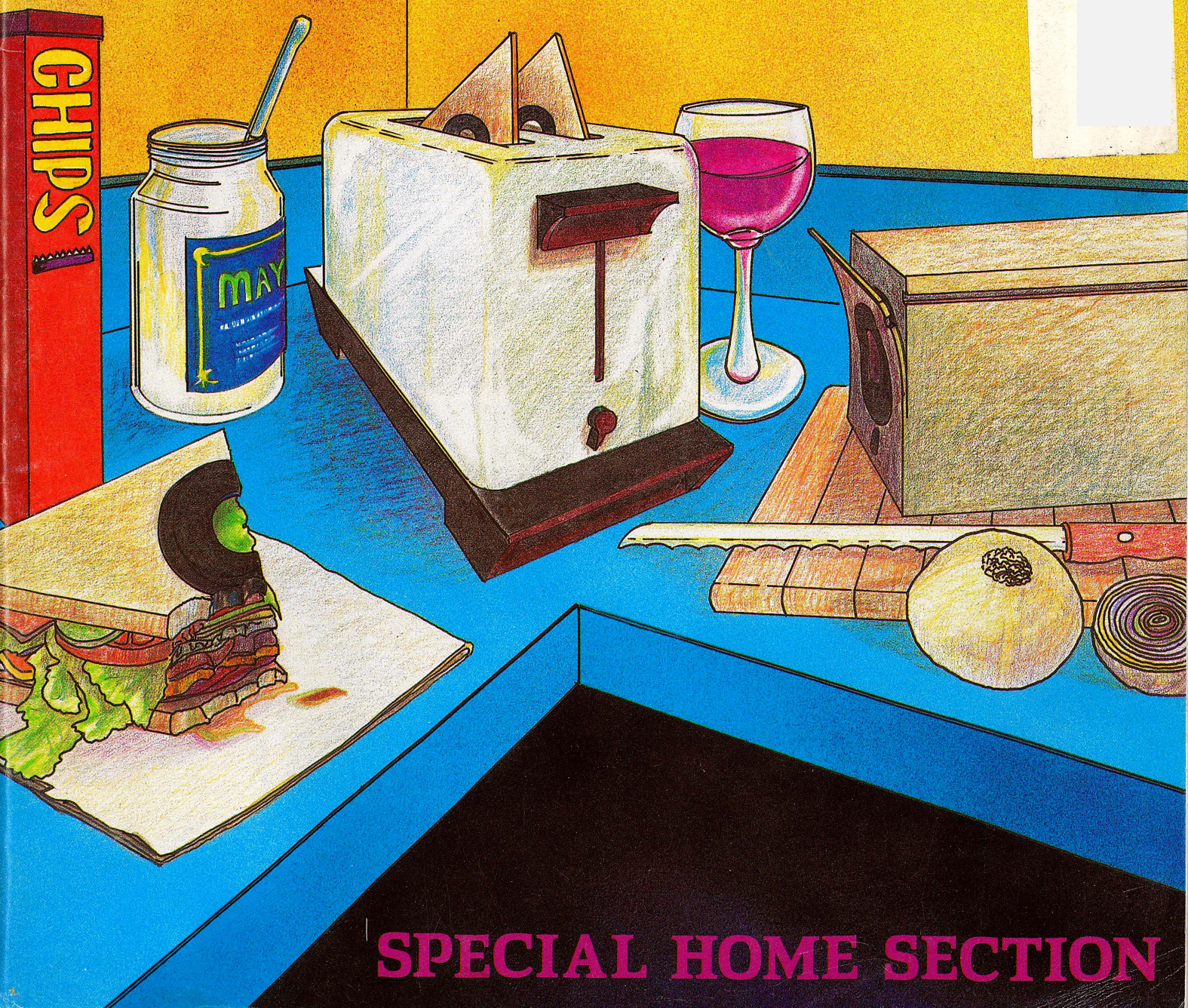

SPECIAL HOME SECTION

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EPSON LQ-1500
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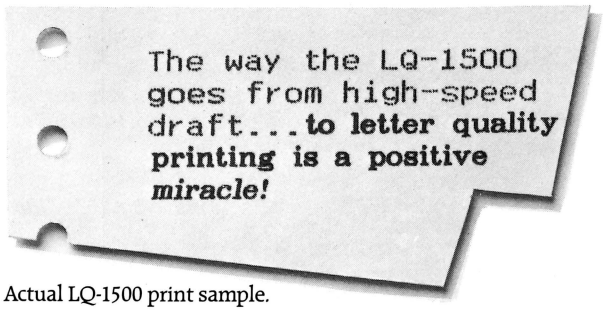

Actual LQ-1500 print sample.

Number one. And built like it. EPSON

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*With optional tractor unit

EPSON CONNECTION

APRIL 1985

DEPARTMENTS

5 EDITORIAL

6 NEWSNOTES

7 BOOK REVIEW *The Epson QX-10 User's Guide by Jim Hansen*

8 NEW PRODUCTS

14 USER TIP
A Valdocs User Tip

24 DISK of the MONTH EC-9

37 BOOK REVIEW *The Epson QX-10 Getting Started Workbook by Michael Greer*

22 SHOPPERS GUIDE

38 PROGRAM: Burnoff

39 USER TIP
Using ROM Subroutines on the HX-20

42 RX for PX

46 USER TIP
Controlling your Epson printer

47 TAPE of the MONTH

48 QUESTIONS and ANSWERS

50 WORD SEARCH PUZZLE

50 ADVERTISERS INDEX

FEATURES

11 **Teletype** *by Mike Dilbeck*
An application in basic and a journey into the past.

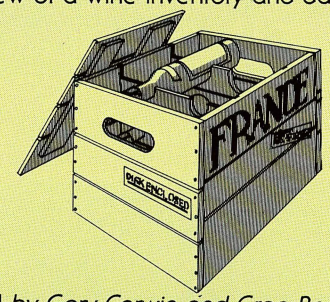
12 **Lync** *by Bob Hermann*
A review of a versatile and powerful communications program for the professional.

40 **The Service Connection** *by Martin Allen Lash*
An introduction to the Service departments at Epson America.

SPECIAL HOME SECTION

17 **Checks and Balances** *by Ken Fermoyle*
An excellent and easy to use personal finance program.

18 **Micro Wine Companion** *by Chris Girard*
A review of a wine inventory and database program.



20 **V-Spell** *by Gary Corwin and Greg Barron*
A powerful new spelling proofreading program.

23 **Nutri-Calc** *by Jodi White*
An easy to use nutritional and dietary program.

26 **Family Roots** *By Donald J. O'Toole*
A powerful genealogy program.

29 **The Book of Change - I Ching** *by Franc La Clair*
A unique personal decision manager program based on ancient chinese philosophy.

32 **On-line Shopping** *by Bob Hermann*
The aspects of using your computer to do your shopping.

35 **FontStar** *by Willie Ihlenburg*
A great font generator program to use with WordStar.

THE EPSONCONNECTION

Published By
EpsonConnection Ltd.
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Detroit, MI 48214

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Please allow 2-4 weeks for delivery. Note: The issues are mailed in the same month of the cover date. The EpsonConnection is published monthly by The EpsonConnection Ltd., 1007 Burns, Detroit, MI 48214. **Subscription Rates are:** $24 U.S.A. $30 Canada (U.S.funds) for one year. $38.00 overseas surface mail, (4-6 weeks), $60.00 first class airmail (2-4 weeks) payable in U.S. funds only. The EpsonConnection is circulated internationally to Epson users, owners, dealers, and distributors, with Second Class postage rate pending in Detroit, MI. Please send all inquiries regarding subscriptions, editorial or advertising suggestions, EC-Disk of the Month, Tape of the Month Services, Program info., or User Group Info., to: **EpsonConnection P.O.B. 14027, Detroit, MI 48214.** Send all inquiries regarding advertising to: **The EpsonConnection P.O.B 184, Novi, MI. The EpsonConnection is an entirely independent entity from Epson America and it's Distributors.** Epson, QX-10, Geneva PX-8, QX-16, HX-20 are registered trademarks of Epson Corporation and, TPM, Valdocs, RSI Basic, ValDraw, ValPaint are registered trademarks of Rising Star Industries, Inc. CP/M is a registered trademark of Digital Research, Inc. QXPC-2 is a registered trademark of Titan Technologies Inc., MicroSoft and MS-DOS are trademarks of Microsoft Corporation.
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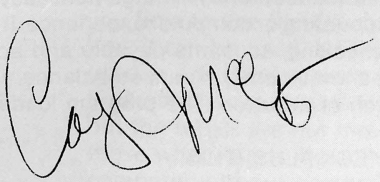
Editorial

The special focus of this month is personal, or home applications. There are of course thousands of different uses. We look at shopping at electronic malls from home, assistance with your nutrition, a guide to your wine cellar, handling your checkbook, meeting your special font needs, a hot new spelling program which has caught misspelling not found with Word Plus or Spelling Proofreader, a decision analysis program, and tracing your family roots. Themes in the near future will include MS-DOS for the QX-10 and QX-16, Word Processing and related products, and of course Valdocs 2.

We are pleased with the 10% response to the reader survey card.

- ★ The majority of owners (over 80%) would recommend the Epson desktop computer to a friend.
- ★ CP/M is used by over 80% of the owners, and TP/M by 60%.
- ★ Valdocs wins hands down as the most popular wordprocessing program on the QX-10, with PeachText second, and WordStar only used by 15%.
- ★ PeachCalc is used by over two thirds of the user population for spreadsheet use.
- ★ Almost 50% of the owners have modems, Hayes and the CR-103 are the predominant modems in use.
- ★ Business use of the computers is somewhat higher than personal use, and word processing and spreadsheets were the most common applications.
- ★ Who are we? A profile of the owners reveals over 75% have 4 or more years of college education. The age range is almost exclusively 30 years and over, with one-third of the owners over 50 years old. Almost half of the owners indicated an annual income of $40,000 and above. Most owners own only one computer and one printer. 70% indicated it was their first computer.
- ★ Advertising appears very helpful as 60% indicated they had purchased products from our advertisers.
- ★ Color capability was not important to 75% of the users. Of those interested only one person would pay $1500 to have it.

It will take a little longer to evaluate the written comments. We certainly appreciate your responses. The list of winners for the reader response survey is listed this month.



NewsNotes

New software continues to be introduced for the QX-10.Metro Software (Tucson, AZ) has announced a new business graphics drawing program which is scheduled for release in the next few months. This program may be used with Qplotter or by itself. A graphic program for musicians is now available, called QX-Composer by Grossman Productions (Houston, TX). Orange Microware (Orange, CA) is sending out copies of their Exam-riter and Type-riter programs to user groups for review. A Cribbage Challenge game will be arriving soon from Gary Hardenburg and Robert Fraune.

Software for the Geneva portable will include a 6800/6801 Cross Assembler, a C-80 Compiler, Lisp/80 and TCL Pascal. There are quite a few companies preparing software on ROM chips for the portable market. Recently, the PortableCalc Spreadsheet program proved helpful for computing payroll figures while traveling out of town.

Development of mass storage devices for the computer is surging forward. Hitachi has a desktop mass floppy disk drive which has a five gigabyte capacity, per spindle. It has 500 8-in floppy disks in a small sealed case, which rotates all at once. The transfer speed is 0.7Mbytes, which is faster than an optical disk. Compact disk manufacturers are also developing optical ROM systems for computers. A single 4¾-in CD ROM has a capacity of over 550Mbytes of storage. This represents approximately the equivalent of 500 double-density floppy disks.

The new phone technology has made it possible to drive or fly using your portable computer, and engage in telecommunications while traveling. Most of the Detroit area up to Flint and west to Grand Rapids is operational with a cellular phone from your car.

The QX-16 and Valdocs 2 are scheduled for release within the next few months. Rising Star has not announced their intentions to release additional products, although most users are aware of the Valdraw and Valpaint programs they have been working on.

William Volk, an extremely talented programmer who is responsible for most of the Valdraw development for Rising Star Industries has recently released his adventure game (Pyramid Peril) for the Macintosh computer. This is a challenging three dimensional search for an idol which you must find, and then escape with. Perhaps William will release a version for the QX-10?

It now appears the Epson InterAct 1985 User Group Conference will be held in June. This delay is not expected to hold up the release of Valdocs 2 if it is ready prior to that time.

Please note the RBBS listed for Denver Colorado is no longer in service — Remove this number from your list: 303-249-1940 it is a private phone. Thanks. ■

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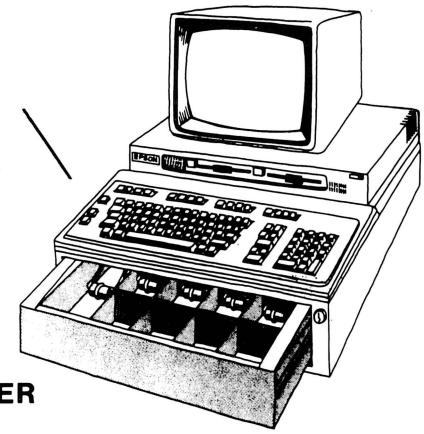

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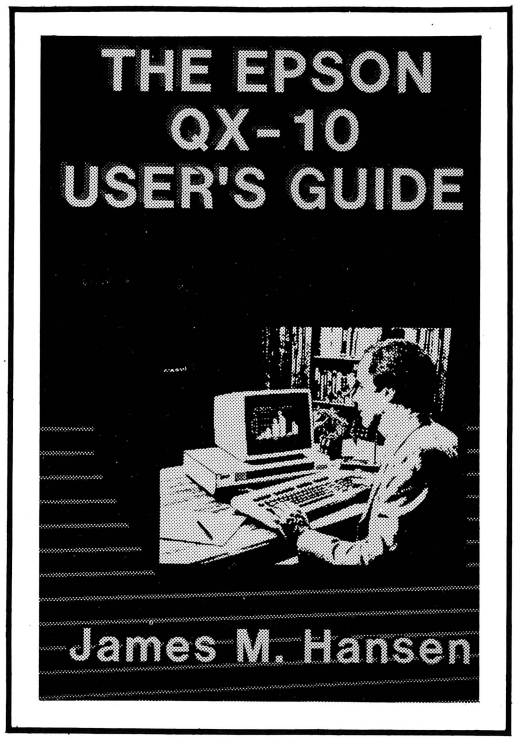
Book Review

by Bob Hermann



Book: The Epson QX-10 User's Guide
Author: James M. Hansen
Publisher: Scott Foresman & Company 1984
Price: $17.95
Book #: ISBN 0-673-15973-6

Reflecting the background of the author, a professional hardware engineer, this book is definitely more hardware oriented than other books on the QX-10. Mr. Hansen thoroughly dissected the QX, showing and explaining what is under the hood.

Starting with a history of the Epson Corporation itself, we then are presented with a detailed narrative for the physical features of the QX, complete with illustrations, tables (see figure 1), and even electronic diagrams. An indication of the depth of this discussion is that there are ten pages devoted to the keyboard alone.

But hardware is not all that is covered. TPM and CP/M are introduced, compared and contrasted. Consistent with the overall frame of reference of the book, the narration explains why such operating systems are necessary, and how they interact with the computer and the user. A synopsis of the respective commands and functions of each system is presented, but there is no 'how-to,' to do this or that type of dialog.

The author introduces Valdocs and the Peachtree software available through Epson. The discussion of Valdocs includes the history and concepts behind its development, a concise description of how to use it, and a detailed discussion of the HASCII keyboard. The discourse is obviously biased, omitting any indication of the many problems associated with it's development, including the slowness of the Editor in version 1.

The author also comments on six Peachtree applications programs (probably because he admits to using PeachText to write the book, not Valdocs). A few comments on WordStar would seem appropriate, but none are made.

The chapter on BASIC is anything but basic. Topics discussed include the IOBYTE, baud rate control with BASIC, calendar-clock addressing with BASIC, and using the QX speaker.

The final two chapters describe the flexibility of the QX in terms of the peripherals and expansion options available for it. This information is not as timeless as that in the rest of the book. As a result many comments on specific items are outdated, although the general ones, such as what to look for in printers and modems, are not. No mention is made of either the Titan board or SemiDisk.

In summary, the contents of the User's Guide are directed towards those who are interested in what makes the computer tick. It is not by any means a 'step by step how to' type of narration. It does not show you how to use the QX, but rather how it can be used, and why it can be used in a particular manner. Explanations are easy to understand, but the topics are not intended for those who wish to be able to use the computer without comprehending how it operates. A more appropriate title would be 'The Anatomy and Physiology of the Epson QX-10.'

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FIGURE 1
Exerpts reprinted with permission from The Epson QX-10 User's Guide
Pages 31,45,47,127,147

SELECTED MEMORY LOCATIONS.

Memory Address	Function
0000	Jump to LIOS/BDOS to Start Operating System
0003	I/O byte used to direct input/output on system
0100	Starting location of application programs.
I/O Address	
00	Loudspeaker timer
01	Timer #1-not assigned in QX-10
02	Timer #2-not assigned in QX-10
03	Command Register (8253)[timers at location 00,01,02]
04	Loudspeaker frequency
05	Keyboard clock
06	RS-232C serial port clock
07	Command register (8253)[timers at location 04,05,06]
08	Master (8259) interrupt controller
0C	Slave (8259) interrupt controller
10	Keyboard Data
11	RS-232C Data
12	Keyboard command register [7201]
13	RS-232C command register [7201]
14	Printer data
15	Printer status
16	Printer control
17	Command register [8255] for printer
18	DIP-Switches
30-37	Floppy disk addresses =>stay clear<=
38-3B	Screen control addresses =>stay clear<=
3C	Clock Data
3D	Clock address

RS-232C Connections To Hayes Smartmodem

Modem	QX-10	Bell-103 Tone Pairs (Hz)
2 =>Transmit Data	2 =>Transmit Data	S:1070=>A:2025;S:1270=>A:2225
3 =>Receive Data	3 =>Send Data	R:2025=>A:1070;S:2225=>A:1270
7 =>Ground	7 =>Ground	Logic: 0=[+]; 1=[-] Voltage

46818 Calendar-Clock Addressing

I/O Loc.	Content of Reg.	I/O Loc.	Content of Reg.
61	Write only addr	62	Read-Write Data
0	Second Data	1	Alarm Second Data
2	Minute Data	3	Alarm minute Data
4	Hour Data	5	Alarm hour Data
6	Day of week	7	Day of month
8	Month	9	Year
10	Status Byte-stay clear	11	Status Byte-mode setting
12	Interrupt Status Byte	13	Memory Valid Status
14-63	Random Access Memory		

Technical:

Microprocessor	* Z-80A (NEC %PD780AC-1) at 4 MHz.
Memory	* 256K on main board
	* 2K CMOS RAM with battery backup
	* 128K display memory
	* 4 to 32K of EPROM
Monitor Display	* Green, long persistence 20 MHz high resolution
	* Alphanumeric: 25 lines, 80 columns;
	* Graphics: 640 dots horiz. by 400 lines

Technical Info cont.

QX-10 Parallel Printer Interface

Pin #	Signal	Pin#	Signal	Pin#	Signal
1	Strobe	2	Data 0	3	Data 1
4	Data 2	5	Data 3	6	Data 4
7	Data 5	8	Data 6	9	Data 7
10	Acknowledge	11	Busy	12	Paper Out
13	Printer Select	14	Auto Line Feed	15	---------
16	GND	17	Chassis GND	18	---------
19	STR. GND	20	Data 0 Gnd	21	Data 1 Gnd
22	Data 2 Gnd	23	Data 3 Gnd	24	Data 4 Gnd
25	Data 5 Gnd	26	Data 6 Gnd	27	Data 7 Gnd
28	Ack. GND	29	Busy GND	30	Prime GND
31	Input Prime	32	Fault	33	GND
34	----------	35	Printer ON	36	----------

The RS-232C Serial Interface

Pin #	Signal	Description	Direction
1	GND-frame	Protective GND	Both
2	Tx-Data	Data Transmitted	From QX-10
3	Rx-Data	Data Received by	To QX
4	RTS	Request To Send Data from	From QX
5	CTS	Clear To Send to	To QX
6	DSR	Data Set Ready (modem ready status)	To QX
7	GND	Signal GND-common ref. for signals	Both
8	DCD	Data Carrier Detect	To QX
20	DTR	Data Terminal Ready	From Qx

New

PX DataBase Management System CP/M $95.00

Possessing almost the same capabilities as the QX-10 version (see JAN 85 EC, pg. 44 for review), this program (and the QX one) has been compiled allowing significantly faster execution. The differences quoted are a decrease in fields/record to 20, characters/per field to 50, and report formats to 10. Operation on the PX requires an additional memory device (60 or 120K RAM, or TF-20 floppy disk drive). This microcassette distributed program will shortly be able to interact directly with the QX version.

Brian Lomasky
984 Hanover Road
Meriden,CT 06450

HX PowerfulPak $125.00

This is a ROM based program capable of word processing and communications. Its features include: a tape operating system, sideways printing, multiple files of any dimension, word processor (including replace, block operation, re - formatting), uploading / downloading, communications, and software expandability.

CompuPak
3880 avenue de Courtrai #202
Montreal, Quebec Canada H3S 1C1

PX Executive Travel Manager CP/M $500.00

This complete travel expense system is designed to accommodate the new tax laws which change the reporting procedures for mileage and other business expenses. It enables categorization by business/personnel expenses into various classes and methods of payment. Report by day, week, trip or year to date. Included is an appointment reminder and daily activity report. A complete system, with PX-8, 80 column thermal printer, and Halburton attache case is available at an introductory price of $1695.00.

Motherboard Companies, Inc.
2539 S. College Ave.
Ft. Collins, CO 80525

Products

QX ACNAP2
CP/M $72.95

This is a general purpose AC network analysis program which analyzes active and passive electronic circuits of up to 200 components and 30 nodes in a single pass (larger circuits require multiple passes). It contains a full feature circuit editor. It automatically computes the magnitude and phase at any node in the circuit and includes Monte-Carlo, Worst Case, Noise Equivalent Band width and Sensitivity analyses. Log or linear frequency sweeps may be specified. Menu driven input simplifies use.

BV Engineering
2200 Business Way, Suite 207
Riverside, CA 92501

QX dB/INDEX
CP/M $120.00

This is a library of routines that can sort, index and pack dBase II files 15 (or more) times faster dBase can. It also includes a program capable of repairing damaged data bases. The routines may be operated as stand alone modules, or may be called directly from dBase. The increased speed is a result of algorithms which use the computer's buffer area more efficiently.

WordTech Systems, Inc.
P.O. Box 1747
Orinda, CA 94563

QX iLisp
CP/M $49.95

This implementation offers all the traditional advantages of Lisp programming: extensibility, modularity of code, and a flexible and highly interactive programming environment. Advanced features include: floating point and integer arithmetic, assembly language interface, trace and debugging utilities, and documentation and source code of all utilities. A 60 page introduction to Lisp accompanies the 165 page reference manual.

Computing Insights
P.O. Box 4033
Madison, WI 53711

QX The Random House Proofreader
CP/M $50.00

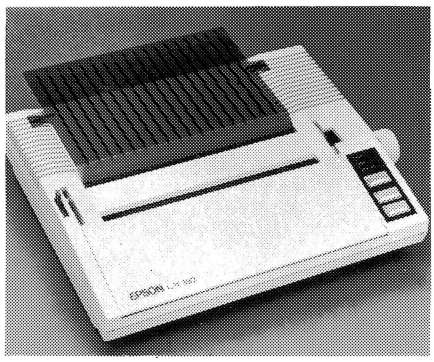
This automated spelling checker uses a 50,000 word dictionary to detect spelling errors. All errors are displayed in context, and corrections can be made without having to go back to your word processor. Special vocabulary words may be added to the dictionary as they appear in text, or you may even create an auxiliary dictionary. Possible corrections to misspellings may even be displayed.

Digital Marketing
2363 Boulevard Circle
Walnut Creek CA 94595

QPHX Code-A-Phone
$695

This is an intelligent 300/1200 baud modem integrated into a two-line desk telephone. Compatible with RS232C interfaces, it can replace other modems and add two line capability to a data communications system. It offers both tone and pulse dialing, audible and visible phone status indication, hold function, auto re-dial of last number, and volume controls. The modem has full duplex operation, automatic answer and status indication and automatic baud rate selection.

Code-A-Phone Corporation
16261 S.E. 130th
Clackamas, OR 97015



X LX-80 Dot Matrix (NLQ) Printer
$349.00

Called the Spectrum LX-80, this 80 column printer features both draft and near letter quality modes. Epson's SelecType feature offers fingertip control of over 160 different typestyles. The printer comes with a parallel interface, friction feed, and a 1K buffer. Options include a 32K buffer board ($175), and tractor and cut sheet feeders ($39.95 and $99.95 respectively).

Epson America, Inc.
2780 Lomita Blvd.
Torrance CA 90505

HX SUMS-UP
PROP $25.00

This numbers game is designed for people of all ages. It features ten levels of ability and five options.

Phillip Congrave
29 Roundhay Avenue
Leeds LS8 4DU
England

QX SAT
CP/M $299.95

This SAT college board preparation series consists of over 55 programs that use self-customizing logic to focus on areas that need improvement. It assesses your performance, analyzes your errors and then uses this information to customize a learning program. It covers all math and verbal areas of the SAT exam. An optional vocabulary building package is also available.

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Concept Development Ass., Inc.
7960 Old Georgetown Road, Ste 2D
Bethesda, MD 20814

QX Archive
CPM $24.95

Archive is a disk utility that groups files to be saved into one file with a large savings in disk space. In addition, with this program you can create an archive file whose contents can be listed, updated, updated, appended, appended, extracted, and deleted. This utility solves the problem of keeping related files under one title and allowing immediate access to any of its contents. You can archive binary files as well as text files. Wild cards for filenames are supported.

Generic Software
P.O. Box 790, Dept 1140
Marquette, MI 49855

QX Micro Kitchen Companion
MS-DOS $39.95

With the Micro Kitchen Companion you can instantly find the recipe you need now, just by describing how much time you have, ingredients on hand — or even what pan you want to use (or have clean). Instant resizing for up to 999 servings at the touch of a button. And hours of data entry are not required. Just put in one of an ever-expanding library of COOK-BOOKS-ON-DISK.

Concept Development Assoc., Inc.
7960 Old Georgetown Rd. Ste. 2D
Bethesda, MD 20814

QX GAMEPAK
MBAS $45.00

This is a collection of games for the QX-10. Trade and adventure games, fast action games, strategy games, and other interesting programs.

Custom Computing
1841 Lincoln
North Bend, OR 97459

QX XTRAKEY 2.0
CP/M $49.95

Program keyboard macros into your favorite applications program with this product. You can combine often used commands to save keystrokes. Or you can send character strings directly to the printer and video display. Standard features include: a clear screen function, the ability to turn a printer off or on from within a program, key definitions that chain to other key definitions, unlimited string lengths and backspace correction.

Xpert Software
8865 Polland Ave.
San Diego, CA 92123

X Underware Printer Ribbon
$19.95

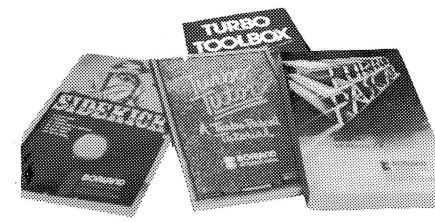
This printer ribbon allows you to permanently transfer any output from your printer to a T-shirt. The iron-on transfer capability allows you to wear whatever you can print.

Diversions
1550 Winding Way
Belmont, CA 94002

QX POWER!
CP/M $169.00

This utility helps do everything from avoiding BDOS errors to recovering lost files, to file transferring. It contains over 55 CP/M utility programs compacted into 15K. You may organize directories in up to 4 ways, spool the 'typing' of CP/M files find and avoid bad disk sectors, create up to 32 user areas instead of 16, and much more.

Computing!
2519 AK Greenwich
San Francisco, CA 94123



QX Turbo Tutor
CP/M $34.95

This self study guide to Turbo Pascal features a step-by-step approach. It comes complete with commented source code for all programs on disk.

Borland International
4113 Scotts Valley Drive
Scotts Valley CA 95066

An Application in BASIC. . . . . And A Journey Into the Past

TELETYPE

by Mike Dilbeck

Back in the old days of computers, not just before the QX-10, but way back, there was a time when computer pioneers were doing the equivalent of crossing the continent in covered wagons.

If you'd like, we can return to take a trip back to those thrilling days of yesteryear, when in computing, there were no monitors, no CRT's, just typing terminals. Typing terminals were the only way of communication then. You had to have paper in the terminal and information was sent just as if it was being remotely typed.

This procedure only works with CP/M since TPM has advanced too far and no longer seems to support some antique functions. We start our journey by booting up with CP/M, and entering MBASIC<cr> at the prompt. At the "OK" we type in the following short program:

```
10 POKE 3,130
20 PRINT "TYPING TERMINAL TEST"
```

Now, turn on the printer. Type "RUN<cr>". The printer will print out "TYPING TERMINAL TEST", then "Ok". Now, hit any key. Nothing will appear on the screen, but each key typed is printed by your printer. Type "SYSTEM<cr>" and you're out of MBASIC and back into CP/M, but still the printer is your only source of feedback. Type "DIR<*CR*>" or execute any program you have on your disk. All output is to the printer. Nothing appears on your screen. You can call a local bulletin board, but make sure you ask for the maximum number of nulls. If you don't, your printer may not be back at the beginning of the line, after a return before the BBS starts sending the next line and you miss some characters (So that's what that "Do you need nulls, 0-9" question is about).

Well, after experimenting for a while, you should have a better appreciation for the CRT that came with your computer. Now, how do you restore things to normal? One way is just to re-boot. The other is to return to MBASIC and add some lines to the program we started writing above.

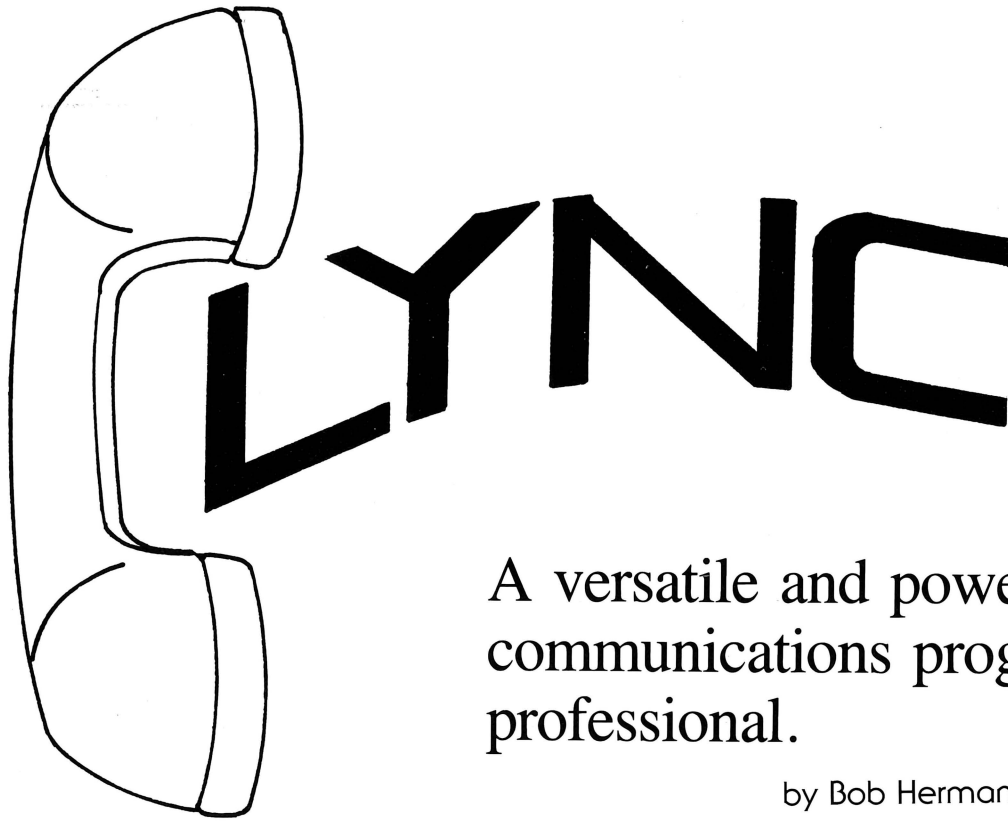
Monitoring your printer, type "MBASIC<cr>" again. After the "ok", let's type in a complete test program to show what was going on above. What we have been doing is manipulating the input/output byte located in memory at address 03H. This is the memory location that tells your system where to expect data to come from and go to; it is explained in "The CP/M Primer" and inthe well-written documentation that came with CP/M-B. The documentation and the two disks are well worth the $20-30 dollars most dealers charge for CP/M-B, even if you don't use the B version which has some advantages and some disadvantages over CP/M-A.

Here's the complete program for manipulating the I/O byte and parts of it can be used in MBASIC programs you write where you want to turn the printer on for a while and turn it back off without exiting the program; for example, to keep score in a game, or to print the results of a series of calculations, etc.

```
10 POKE 3,130
20 PRINT "TYPING TERMINAL TEST"
30 POKE 3,129
40 PRINT "TEST SUCCESSFUL"
```

Now type "RUN<cr>" and your CRT is back in operation. The application for the present is to use the commands in lines 10 and 20 anywhere you want in an 1 MBASIC program to turn the printer on and back off again. Poke 3,130 puts the system into batch mode, which means the keyboard (TTY) is the input and the line printer (LPT) is the output. Poke 3,129 is the normal value of the I/O byte. This will probably not work with RSI BASIC. I haven't verified that yet because I don't have it, but I suspect that it won't because it won't work with MBASIC running under TPM. TPM just won't go into batch mode, even if you try to make it do so.

There you have it; a journey into the past... how did they stand it? An application you can add to any future MBASIC programs you may write... ■



A versatile and powerful communications program for the professional.

by Bob Hermann

SPEC SPOT

Program: LYNC
Type: Communications
Computer: Epson QX-10 and PX-8 (versions available for almost any microcomputer)
Operating System: CP/M 2.2
Price: $195/version
Ease of Use: Excellent
Performance: Superb on QX, questionable on PX
Documentation: Exceptional
Summary: Easy to use, well documented, command driven, versatile communications program with many advanced features (one of which is not yet available for the QX). Seems designed more for professional than private use.
Manufacturer:
Norton-Lambert Corporation
P.O. Box 4085
Santa Barbara, CA 93103

Communications programs for the QX and PX flourish. In addition to the many public domain programs many commercial products are currently offered for both computers: Crosstalk, Mite, MyHost, the Geneva Connection, PT-100, TelMerge, Blast and several more. Lync may now be added to this ever-expanding list.

INSTALLATION AND MODES OF OPERATION

The Lync disk contains 4 main programs: LINSTALL.COM, HELP.OVR, ES80.LSC and MODEM.LMC. The disk itself has no write-protect notch, making it impossible for the user to accidentally erase the master disk. After making a copy of the master disk the user must first "install the program for the QX (or PX) and modem used." Consistent with the general user friendliness of the program, this installation process takes about 25 seconds to do on the QX. You answer two questions: What will be the default baud rate and what modem (from a list of five) will be used. Then you may accept the default name — LYNC.COM — or assign it any other CP/M proper filename with a slower speed making the process somewhat longer.

The 16K file created is three programs in one (see Figure 1). The TERM mode is self explanatory. This is for normal communications with other computers, regardless of the type of software incorporated on the other computer.

The LYNC mode requires both computers to have the LYNC program.

The LYNC mode requires both computers to have the LYNC program and be in the LYNC mode. It does not require the two computers to have the same operating system. In this mode the two computers are always in the chat setting and neither exerts more control over the connection then the other. Either operator may send or receive files from the other, incorporating a special error checking and correcting protocol (if the computers are directly connected transfer may be accomplished at speeds up to 9600 baud). Either operator may look at the drive directories of the other or 'type' out a file on the other's computer. The slowness of the PX-8's screen prohibits conversational interaction at speeds greater than 300 baud, although direct connect file transfer at 9600 baud was accomplished.

The REMOTE mode requires at least one computer to have the LYNC program. Generally the one with LYNC could be called the 'answerer'. The caller then may remotely interact

OVERVIEW
LYNC PROGRAM

LYNC is an integrated communication package that is divided into three modes which give you the power of three separate programs.

TERM MODE

Use when the computer you are communicating with does NOT have the LYNC program.

TERM (terminal) Mode to communicate with: MCI Mail, NewsNet, Dow Jones, CompuServe The Source, Knowledge Index, Telex services Official Airline Guide Mainframe-Computers Mini-Computers Xmodem protocol Computers.

LYNC MODE

Use when the computer you are communicating with HAS the LYNC program.

Guarantees that no data will be lost in transferring ANY type of file between computers, even with different disk formats and different operating systems.

REMOTE MODE

Use when one or both computers are running the LYNC program.Allows you to run and interact with programs on a REMOTE personal computer.

Allows you to run and interact with programs on a REMOTE personal computer.

The REMOTE mode requires only one computer to have the LYNC program.

with this 'answerer' to the extent of being able to operate its resident, non-machine specific software. You would then be able to access a QX in the remote mode with a PX (or even an HX) and run programs like dBase, PeachCalc, or WordStar (at 300 baud). Operation of Valdocs in this manner would probably not be possible, because it is a machine specific program. This feature was not implemented on the program submitted for review, but the vendors assured us that they plan to incorporate it into the QX version soon.

USING THE PROGRAM

Once installed you can operate this command oriented program without referring to the manual. This is partly because its ease of operation, coupled with the on-disk help not only explains many of the programs features, but also has several tutorials on how to use these features. Just start the program by entering "LYNC<cr>". You inform the program that you wish to execute a command by hitting the ESC key (CTRL - MAR REL on the QX) which gives the command prompt "@". Then enter the appropriate commands or string of commands, each delineated by a semi-colon.

The command syntax consists mainly of English words that do exactly what they mean; i.e. DIAL dials the phone, COMS gives a list of commands available, HANGUP hangs the phone up, and SEND transfers a file. Enter "HELP" at the command prompt to gain access to the first of several on disk tutorials. The first tutorial introduces the modes of operation of the program, tells how to issue commands, and instructs the user how to access the remaining extensive list of help files. These files may be accessed at any time, except when sending or receiving a file. They allow the user on disk access to the quick reference guide contained on pages 6-1 to 6-5 of the manual, immediate help on the use of several commands, and several tutorials including the use of all three modes and xmodem file transfer.

Don't be fooled into thinking that the simplicity of the command sytax detracts from the power of the program. For instance the LOG command allows for automation of the sign-on procedure, as well as the sending and receiving of files. The master disk contains samples of LOG files for use with such services as CompuServe, MCI, NewsNet, and Knowledge Index. Unlike similar features on other communications programs, the instructions in LOG files are not accessed sequentially, eliminating any "timing" errors to responses associated with such structure. If you have created your LOG file properly, you will have a corresponding response in it for every possible prompt that the host system may issue. Figure 2 is an example of a LOG file that accesses CompuServe, goes to the EpsOnline Special Interest Group, and retrieves (and stores to disk) all the new messages since the last access.

```
\ATDt 5674920
NO CARRIER\ (END)
CONNECT\ ^C
Name:\ cis
User ID:\ 74015,377
Password:\ camp/here
!\go pcs-19; (SAVE/T CIS12/20)
Function:\ rn
Option:\ ^M
```

Figure 2

This file is created in the non-document mode * of a word processor. It can be called whatever the user desires and is executed by simply entering "LOG FILENAME" at the LYNC command prompt. But the versatility of LYNC allows you to go even further. By using the DEFAULT command you can actually create a version of the LYNC program that accomplishes the entire procedure whenever you enter the program. To do this, in the TERM mode you would go to the command prompt by hitting the ESC key, and then enter "DEFAULT LOG FILENAME". Next you are then prompted for a name to save this new program under, say LYNCCIS; then the program is created. You now have a version of the program that when loaded will automatically dial the phone, access CompuServe, go to the CIS EpsOnLine SIG and record to disk any new messages since the last time you were online. You may similarly create versions of the program to do other communications tasks, remembering that any such created program is fully operational and uses only about 16K of disk space (the HELP.OVL file must reside on the same disk as the version of the LYNC program to allow access to it). You may, of course,

desire only to use the LOG feature and create multiple LOG files. More advanced batched processing may be accomplished with use of the "DO" command.

We noticed that the CLEAR command (clears the screen) did not function on either computer. But the manual does indicate this feature is not operational for all computers.

DOCUMENTATION

As we have already mentioned, once you have read enough of the manual to be able to make a copy of the master disk and install the program, you could use LYNC without ever opening the manual again. This would be a shame however, because you would be missing one of the best software manuals ever prepared. As already indicated, the program itself is designed so that even the novice will quickly grasp the essential facets of its operation. The documentation mirrors this, but it is also constructed so that advanced users can quickly find and absorb the particulars required for various specific applications.

You can use LYNC without ever opening the manual.

The entire onscreen manual is contained in the hardcover copy, supplemented extensively with more tutorials. One section includes a listing of every command, the mode(s) it may be used in, its purpose, usually a few remarks about it, and example(s) on its use. A handy indexed quick reference chart and the manual's own index facilitate problem solving.

OTHER CAPABILITIES

There are several features of LYNC that we have not yet mentioned. Included in this list are:

- Automatic determination of parity and data bits.
- Phone number directory.
- Printer control.
- Password protection for LYNC and REMOTE modes.
- Ability to toggle off and on the display of control codes.
- Timing control, to allow commands to be performed seconds, minutes, or even days apart. This is directly applicable in effecting the unattended operation of the program.
- Ability to use several CP/M commands when in LYNC.
- Control of program access to REMOTE users.
- LYNC runs on over 180 different computers and is configured for the following operating systems: CP/M-80, CP/M-86, MP/M-80, MP/M-86, MS-DOS, PC-DOS, TURBO-DOS, APPLE-DOS, CCP/M, Z-DOS.
- Wildcard sending and receiving of files.

As we have seen, the LYNC program is exceptionally versatile, with the ability to configure and create many versions of the program designed for particular uses exemplifying this versatility. The program's adaptability is further enhanced by the small size of the actual program file, making it practical to reside on the same disk with a word processor. Its ease of operation will allow even the novice to soon do batch processing tasks. The automatic parity and stop bit feature coupled with wildcard file transfer capability further simplifies matters. It is now my favorite communications program on the QX.

I doubt if there will be much of a market for a stand alonePX-8 version, especially at $195. Also the program is not as yet configured for either the PX-8 internal modem or the CR-103 on the QX. We noticed that the PX-8 version did not seem to be set up properly for the PX's screen, as connections with some time sharing services had the left most three characters of each line truncated. The vendors were not sure at the time of this review of the form of the PX version — whether it would be on ROM chip, tape, or disk. This doesn't mean that PX owners should ignore the capabilities of LYNC if they use their PX with another computer. A version for the 'other computer', whatever the 'other' may be, with the REMOTE feature functional enhances the portable power of the PX. Better yet, a combined package including the PX adaptation for around $300 would be ideal.

*Non-document mode means there must be no control codes present in the file. With WordStar this means opening a document with the 'N' command as opposed to the 'D' one. With Valdocs series 1, this means that control codes would have to be stripped with a program like DEVAL, UNVAL, or ASC. With series 2 Valdocs this may be accomplished by exercising the option to store a file as an ASCII file. ■

» USER TIP «

Valdocs User Tip / TPM to Valdocs?

by Allen Howell

Has there ever been a time when you had a program that ran under TPM and you wanted to try it out? Most people would boot their Valdocs system disk and data disk. Then use COPYDISK to "<S>ingle file copy" their TPM program to the data disk and run the program as an application program from MENU. The other common method is to exit to TPM-II through MENU, then run the program directly from TPM.

There is an easier way to do this. Why bother loading Valdocs when you are going to exit from it immediately anyway?

You can alter your Valdocs system disk so that it enters TPM from a cold start. Then you can decide whether you want to go to Valdocs, or run some other TPM program. To do this; Boot up your Valdocs and any data disk, exit to TPM-II via MENU, then at the "A>" prompt type "REN VALDOCS.SYS = INITIAL.INI" and press RETURN.

NOTE: Remember to exit to Valdocs from the MENU you have to be set to novice or higher in the SETUP menu under the experience level. That's all there is to it.

Now whenever you boot your Valdocs system, the computer will display the "A>" prompt. If you wish to run some other TPM utility, simply proceed to the "B:" drive (assuming that's where your program is) and run the program. If you wish to enter Valdocs, type in "VALDOCS" <RET>.

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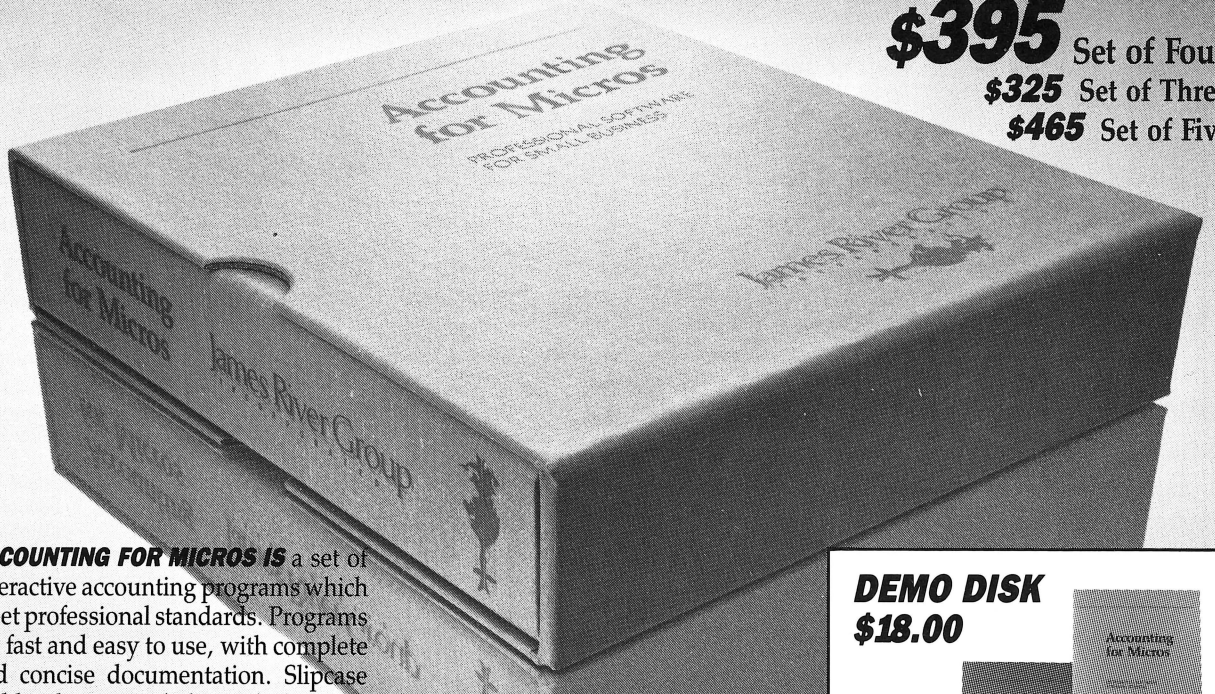

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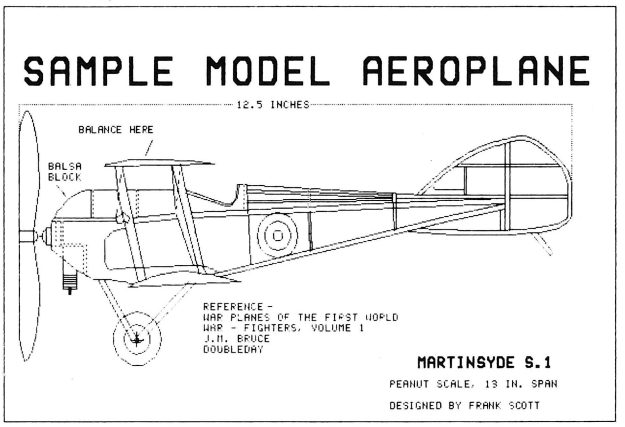

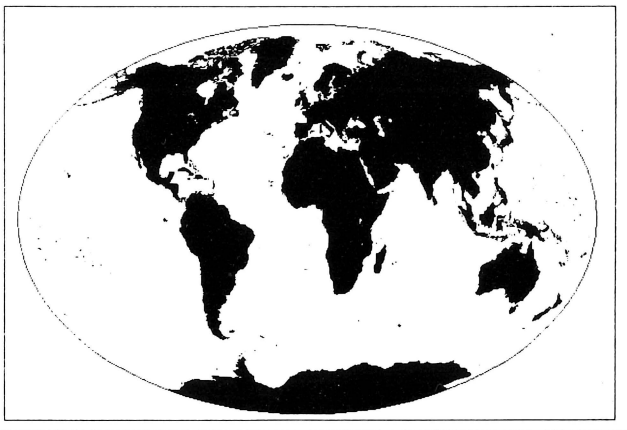

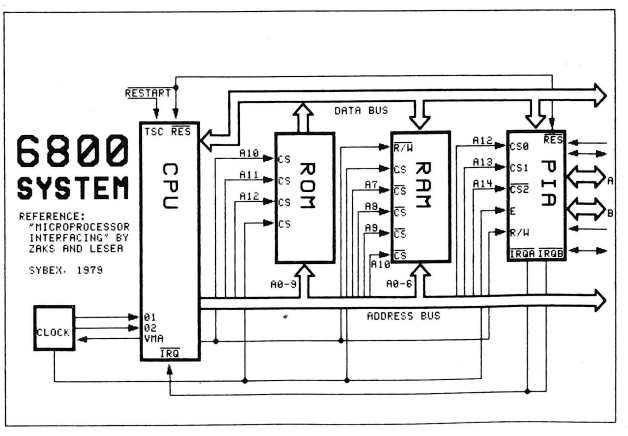

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(specify product name/service) (specify issue date)
issue of the EpsonConnection.

- ☐ Please send me detailed information.
- ☐ Please call me with detailed information.
  Telephone Number (___) _____
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ADDRESS _____
CITY _____ STATE _____ ZIP _____

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Los Angeles, CA 90039

I love reading and collecting books, but I'm not much of a bookkeeper. Like most writers I'd much rather work with words than figures. When I got my QX-10 I had hoped it would help keep track of personal finances better than I'd been able to do in the past.

It turned out that finding the right software to do the job was not as easy as I hoped. Some programs were too slow or limited. The Home Accountant Plus program, reviewed in the October 1984 issue, was one of the former. Written in BASIC and not compiled, it "can be painfully slow," as that review pointed out. Professional double-entry programs such as those from BPI were expensive overkill; they were more complex than I needed.

Several friends rigged up spreadsheet programs to do a certain amount of personal bookkeeping but that seemed to be a lot of work for the results offered.

Then I found *Checks & Balances*. It's a single-entry system that advertising claims touted as "ideal for home or business run out of a checkbook." It could handle monthly budgeting for up to 64 categories, unlimited categories for taxes, and reports for expenses or income, the claims added. All this for $54.95.

Add $25 and it would even print checks and maintain a rolodex-like file of names and addresses that can be searched, crossreferenced and sorted or looked up in a variety of ways. (It turns out that EpsonConnection readers can get these options free, as explained below.)

Sounded too good to be true, but worth a try. Well worth the try, as it turned out! *Checks & Balances* not only performed as claimed, but did it with ease. It would be a bargain at twice the price.

Checks & Balances allows you to display, add and change entries on the screen just by moving the cursor, offering full on-screen editing options similar to those found in word processors. You can't appreciate that kind of versatility completely until you've struggled with some of the bulky, cumbersome methods required to change entries in other bookkeeping systems.

There are other pluses, too. Entries can be split into several categories; a mortgage payment entry, for example, could show the principle and interest amounts, as well as the total. This is handy when it comes time to figure income tax deductions. The MEMO field for each data entry allows up to 40 characters, leading to some pretty cryptic notations which are not so handy to decipher, and explain at tax time.

Checks & Balances handles multiple checkbooks, and has search and printing flexibility that locates/prints records by date, number, category, or by entries you've made in PAY TO or MEMO fields. It keeps track of bills, displays up to seven checkbook-like entries on the screen at one time and, best of all, it uses plain, simple-to-understand English commands to do all these chores.

If you want to check a budget, type the command "BUDGET." Type "SHOW 2327" and full information about Check #2327 will be displayed on the screen. You can print whatever is displayed on the screen at any time by hitting the print screen key (normally control-P for CP/M and F7 for MS-DOS systems.) You can set up the CONFIG command to do PRINT reports in either 80 or 132 columns, or 132 with compressed type; data is displayed on the screen in 80 columns. Another useful touch: a line at the bottom of the screen always shows your true balance and bank balance (depressing as that might be at times!).

Checks & Balances is written in PL/I (a high level language originally designed for large computers by IBM) and already compiled, so it's fast.

It is also command driven, with no linked menus, which adds to its speed. But don't let the lack of menus scare you off; *Checks & Balances*'s creator, Pat Lajko, has made it "user friendly" (to use the popular buzz-words). The list of commands and their meanings is always available, as are HELP screens that offer added aid. The User's Guide packs a lot of information into its 48 pages, though it could stand a bit of judicious editing in spots, and is mercifully free of the unintelligible computerese that infests so much software documentation. I do think the author's claim that "with the command summary, on-screen help messages and pocket reference card,

Checks & Balances is so easy to use that many people do not read the manual" is too optimistic. The guide is valuable, while it does not have an index in the back, the detailed Contents section up front eliminates any real need for an index in a manual of this size. Examples taken directly from the display screen are sprinkled through the pages.

The program is not hard to learn. It may seem a tad confusing at first, but I was able to start a file, begin setting up categories and make entries shortly after completing the configuration procedure. *Checks & Balances* seems to be designed to let you "learn by doing;" it has a DEMO file that you can use to help familiarize yourself with it. It does not offer the fancy charts and graphs that some other personal accounting programs do, but frankly I really don't miss them. Such bells-and-whistles features are more eye catching than practical; the detailed, varied and sorted-to-suit data reports you can generate with *Checks & Balances* cover all the necessary bases.

Checks & Balances does have certain minimum requirements. For CP/M systems these include: Z-80 processor (8080 or 8090 versions available only on special order), terminal with addressable cursor, 56K RAM minimum, 2 or more disk drives with 160K bytes or more per drive, and CP/M 2.2. For MS/DOS systems, requirements are two disk drives, MS-DOS or PC-DOS operating system and 256K RAM minimum.

One last hint: unless you're familiar with your computer you might ask your dealer or a knowledgeable friend to help configure *Checks & Balances* for your system. The procedure is covered in detail in the first 11 pages of the User's Guide, but going through the configuration sequence might be a bit confusing at times to those who aren't well versed in ASCII codes, hex and decimal numbers, etc. Since you can always go back and alter the configuration setup, however, you don't have to worry about doing any permanent harm if you make a wrong choice initially. You might get some garbage on the screen if you goof, but don't sweat it; you just haven't got the correct terminal configuration and that can be corrected easily.

If you would like more information from CDE Software concerning *Checks & Balances*, contact them at: 2463 McCready Ave., Los Angeles, CA 90039 (213) 661-2031. We also understand that they are offering a special offer for EpsonConnection readers. ■

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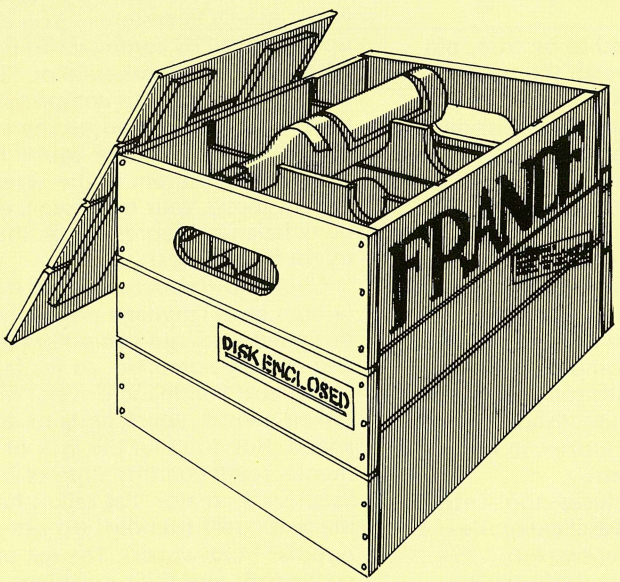


```
                PRINTER MENU

1   Print Wines Alphabetized by
    Name (Appellation and Producer)

2   Print Wines Sorted by Type,
    Country, and Region

3   Print Marked Wines

4   Print Wines in Order Entered

5   Print Blank Tasting Forms

6   Clear Marked Wines

7   Change Printer Parameters

8   Return to the Main Menu

9   Terminate the Program

Select a number between 1 and 9:
```

```
SAINT-EMILION, CHATEAU CHEVAL BLANC 1981
A  RED from BORDEAUX in FRANCE.
Purchased at  on 06/14/84 for $76.
Current value is $76.  1 bottles remaining
in bin .  Recommended breathing time is 2:00 hours.
Appropriate for MEAL.  Ready to drink in 1986.
Goes with BEEF, VEAL.  Drink by the end of 1995.
This wine was rated 7
```

Micro Wine Companion . . .

Is Your Computer Driving You to Drink?

by Chris Girard

SPEC SPOT

Product: Micro Wine Companion
Type: Wine cellar log, mini tutor and aid for wine tastings.
Computer: QX-10 with a QXPC2 board from Titan
Operating System: MS DOS
Required Peripherals: Titan QXPC board & a printer.
Price: $39.95
Ease of Use: Micro Wine Companion is menu driven, and very easy to use.
Performance: Performs well.
Documentation: Brief, well written, complete.
Summary: This is a wine inventory data base and management system, as well as a guide for group wine tastings.
Manufacturer:
Concept Development Assoc., Inc.
7960 Old Georgetown, Rd. Suite 2D
Bethesda, MD 20814

Have you experienced some "bugs in the bits" or impatience waiting for yet-to-be-released software? Take a break and relax with Micro Wine Companion. This program runs with the MS-DOS operating system, and works well on the Titan QXPC2 board for the QX-10. As a matter of fact, if you indulge in a little fruit of the vine while exploring the vast uses for this software, you may not care if version 2000.0 of the latest software has been released.

Micro Wine Companion is a powerful tool for anyone who collects wine, maintains a cellar, or simply enjoys wine. Wine Companion has three primary uses. A mini wine tutor, a wine cellar log that actually acts like a database management system for your inventory, and to organize and tabulate numerous categories and notes on specific wines during group tastings.

Wine Tutor is one of the options in the main menu. This in turn provides additional options: "Food and Wine", "Sweetness (Whites)", "Body (Reds)", "Main Menu", and "Terminate Program". "Food and Wine" lists several dishes and suggests a number of wines that would compliment them. For instance, looking at Veal they suggest using dry to medium-dry whites, Chardonnay; Red Bordeaux, or Savignon. Of course all of the suggestions are subjective. "Sweetness", will show you varying degrees of sweetness from very dry to very sweet, and lists wines that fall under each category. For instance, in the Medium Dry category you would find: Vouvray, Reisling (Germany), Mosel, Chenin Blanc (USA), Frascati and Valpolicella. The "Body (Reds)" choice works the same way, going from light, to medium, to heavy, with suggestions for each "Body" type.

SEARCH - EDIT & DELETE

Search, Edit, and Delete are options available from the main menu. This selection actually accesses a wine database management system for the purpose of organizing, editing, wine tastings, inventory, etc. This section operates like an electronic log, enabling you to keep your cellar updated, search for a specific wine, or select any number of wines with similar characteristics.

When adding wines to the database, you will soon learn that a basic knowledge of wine labels is helpful. The program specifies 19 fields to be filled in. Some of these are: Appelation, Producer, Vintage, Region, Price, Value, Quantity, Food, Year Ready, Breathe (time), Drink By (date), and a Rating from 0 to 9.

Collectors, wine tasting groups as well as restaurants could benefit from this software. The current value of the wine collection is calculated by the program from the data you enter about the purchase cost, quantities, and current market value.

WINE TASTINGS

The wine tasting options are accessed through the **Search / Edit / Delete** selection of the main menu. The software creates blank forms, correlates and tabulates the results, and gives printed reports of group, as well as individual, responses. The tasting notes have 12 categories, with ratings for each of the categories (see chart).

Micro Wine Companion is one of three software packages for the home offered by the Rhyton Gourmet Collection. Micro Wine Companion is a definite asset for any wine enthusiast. The package also includes an offer to receive one free Wine Companion Data Disk. "Award Winning Wines", "Great Vintage Years" and "Classic Companions: Matching Food & Wine." The other two can be purchased individually.

Back to the cellar now, and let's toast to future software for our Epson computers. ■

V-SPELL

by Gary Corwin and Greg Barron

SPEC SPOT

Program Name: *V-SPELL*
Type: Epson QX-10
Operating Systems: CP/M, TPM, MS-DOS
Price: $125.00
Ease of Use: Very easy to use. The "30 minute" written tutorial adequately explains major program features.
Performance: Excellent. The fact that it almost always "guesses" which word you meant, when one is misspelled, is just short of amazing. *V-SPELL*'S 60,000 word dictionary all but eliminates the need for a dictionary on your computer desk.
Documentation: Brief (approximately 45 page) manual is concise and clearly written. The program is so easy that a great deal of documentation is not required.
Users: Anyone who spends time looking up words in a dictionary when typing. The menu driven program requires little knowledge of computing beyond Valdocs.
Support: Good. The manufacturer has a toll-free number, and they answered a variety of questions we had on several occasions. However, there is no specific "hot line" for user support.
Summary: Powerful and easy to use spelling proofreader. The program may seem to be slow in certain areas, but on the whole it's excellent.
Manufacturer:
CompuView Products, Inc.
1955 Pauline
Ann Arbor, Michigan 48103
(800) 327-5895 (313) 996-1299
Telex: 701821

One of the dreariest tasks a writer can face is that of proofing a document. With Peachtree's Spelling Proofreader (PSP) for example, the task frequently entails the use of a dictionary and much patience. Epson QX-10 users now have a better choice. *V-SPELL* is such a well designed and helpful program that it almost makes proofreading your documents a pleasure.

The program comes on a single disk that is formatted for either CP/M (and TPM) or MS-DOS. The only "difficult" thing about getting started on *V-SPELL* is that the reverse video feature needs to be set-up for the QX-10. Following the owners' manual step-by-step instructions, one only needs to set up the program to support the QX-10's Televideo 920 emulation.

The manual is clear, concise and very thorough.

The manual is approximately 45 pages long. It is clear, concise and very thorough. It is centered around a helpful 30 minute tutorial which teaches you practically everything you need to know to take advantage of the program's many features.

We compared the program with PSP, which many of us received bundled with our QX-10s. Happily, we found that in most categories, PSP simply could not compare with *V-SPELL*. We chose to test *V-SPELL* using Valdocs, but the program will work with many other popular word processing packages.

What is perhaps most impressive about *V-SPELL* is the flexibility it offers.

What is perhaps most impressive about *V-SPELL* is the flexibility it offers. Unlike PSP, it has 16 different parameters, or "settings", which the user can custom tailor to his preferences. The changes can be made permanently (to disk) or temporarily (for one session only). You can, for example, toggle on or off "safety features"; on for preventing user errors, off for speed. You can also toggle on or off the "progress display". When on, the progress display function will show you each word the program CHECKS, in real time, as it is matched against the dictionary. When off, again, the program runs a bit faster.

In it's operation, *V-SPELL* is a two step program. The first step is to CHECK the text file you have designated, and the second is to REVISE the document.

In its operation, *V-SPELL* is a two step program. The first step is to CHECK the text file you have designated, and the second is to REVISE the document. The two steps are entirely separate, allowing you to

TABLE

Test file #1 (4½ pages)

	CHECK (secs.)	REVISE (secs.)	TOTAL TIME (secs.)
Floppy disks:			
V-SPELL (1)	109	1058	1167
Spelling Proofreader (2)	60	1530	1590
Hard disk (1):			
V-SPELL (2)	65	1058	1123
Spelling Proofreader (3)	36	1530	1566

Test file #2 (½ page)

	CHECK	REVISE	TOTAL
Floppy disks:			
V-SPELL	67	254	321
Spelling Proofreader	58	348	406
Hard disk:			
V-SPELL	41	254	295
Spelling Proofreader	32	348	380

stop after the CHECK function is complete and REVISE the document at a later time.

In the CHECK operation, the document is read and the words are compared to the words in the 60,000 word, on-disk dictionary. The CHECK function is practically identical to PSP's Proofing phase of operation. Because the *V-SPELL* dictionary contains more words, and because you can have a supplemental dictionary, it performs this operation somewhat slower than the Peachtree program. (See table)

In REVISE, each word that was not found in either the main or supplemental dictionaries is brought up for inspection, one at a time, in the context of the document. The SETTINGS menu allows you to choose anywhere from 4 to 20 lines of text displayed with each misspelled word. The misspelled (or non-recognized) word is always highlighted and is quite easy to find.

At this point, you have six options to choose from in the menu. You can either CORRECT, LOOKUP, IGNORE, ADD word to supplemental dictionary, or MARK the word for later revision. Each function is triggered by pressing the first letter of the command, such as "C" for CORRECT.

CORRECT allows you to retype a misspelled word and then insert it into the text. This is very handy when you have made a simple typo, or if you have accidently left a space out between two words.

LOOKUP is the real power behind the entire program. By using this menu command, *V-SPELL* will look up and display the words in the main dictionary that come closest to matching the misspelled word. You can then select the correct word by typing in its number in the list, or you can continue to LOOKUP additional words or groups of words. The number of words displayed in LOOKUP can be established in the SETTINGS menu. From one to sixty words may be displayed. *V-SPELL* is uncanny in its ability to display the correct word first. No matter how badly the original word was misspelled, nine out of ten times the first word on the list was the correct one!

As an example, suppose that you have the SETTINGS for the number of LOOKUP words set at 15. Let's see how the program works. You have the word "forcasts" in your document. *V-SPELL* tells you it does not recognize it. You hit "L" for LOOKUP and the following list is displayed:

1. Forecasts	6. Forklifts	11. Forcible
2. Forests	7. Formats	12. Forcibly
3. Forces	8. Forts	13. Forcing
4. Footrests	9. Folklorists	14. Fords
5. Forgets	10. Forcefully	15. Forearms

The method for allowing immediate and accurate correction of words, on screen and in context, is what makes this program so powerful and such a joy to use.

This method of allowing immediate and accurate correction of words, on screen and in context, is what makes this program so powerful and such a joy to use. You simply select "1", press <RETURN>, and *V-SPELL* changes forcasts to forecasts everywhere it is found in the document. And the program is smart. If the word to be corrected is capitalized, the replacement will be too.

The program also offers a powerful wildcard feature. For instance, if the word you misspelled is giraffe, but all you know for sure is that it starts with a "g" and ends with an "fe", you simply type in "g*fe" after pressing "L" for LOOKUP and all the words in the main dictionary meeting those conditions are displayed on the screen. The wildcard symbol may be used at the beginning, middle or end of the word to LOOKUP.

The wildcard symbol may be used at the beginning, middle or end of the word to LOOKUP.

But what about Peachtree's Spelling Proofreader? The equivalent function in PSP is to have each unrecognized word shown, in isolation, on the screen. You then have the option of marking it for later correction, adding it to the dictionary, or ignoring it. This is where the time factor is decidedly in favor of *V-SPELL* — the poorer you are at spelling, the greater the time difference. If you are a relatively poor speller, PSP requires that you spend a considerable amount of time looking up words in a dictionary. And each misspelled word must then be retyped. If you have misspelled a word ten times you either have to retype it ten times or use the lookup and replace function of Valdocs. In *V-SPELL*, once you deal with a word, you have dealt with every occurrence of the word in the document — automatically, and without returning to Valdocs.

IGNORE, ADD and MARK are fairly self explanatory commands. They are quite similar to those found in PSP. However, in *V-SPELL*, since you see the context of the misspelled word,

there is no doubt what the word is. In PSP you are never sure if the misspelled word you are looking at is a typo or is actually one half of a hyphenated word.

All of this sounds pretty good, you say. Isn't there anything wrong with the program? Sure. No program is perfect. For one thing, *V-SPELL* does not ignore Valdocs hidden control codes (such as BOLD or ITALICS). You see them in the contextual paragraph and *V-SPELL* sees them as words. This isn't quite so bad, as most of the control codes are numbers and single letters; and *V-SPELL* ignores numbers. So by adding all of the single control code letters used by Valdocs to your dictionary, you can get around that inconvenience. However, that means that any single letter that is actually a typo will now be seen as a legitimate word by the program.

V-SPELL does not justify the right margins and line lengths after replacing misspelled words. If you have right justified margins, or if the size of the correct word is significantly different than that of the misspelled word, *V-SPELL* will leave you with lines that need to be reformatted. This presents a delay, but is quickly corrected by using the <CTL> Q menu and the <F>ormat Entire Document command in Valdocs.

V-SPELL is relatively slow in the CHECK operation. The length of the dictionary and fact that you may also have a supplemental dictionary tend to increase processing time. CompuView claims in its advertising that *V-SPELL* can correct a 50 page document (60K) in "less than 50 seconds". As can be seen in the table, this doesn't appear to be the case with the QX-10. When we contacted CompuView about this discrepancy, they said their test had been done on an 8-bit computer using CP/M 2.2 with a 10 megabyte hard disk drive!

Their test also had all of the features which tend to slow down *V-SPELL* toggled off, such as the progress window in CHECK and the supplemental dictionary. However, even when we tried to duplicate those conditions (using a ComFiler 10 megabyte hard drive), we still found it took us significantly longer. Even though the Spelling Proofreader is quicker in this initial stage, it is the later CORRECT stages where the vast bulk of the time is spent. And it is in these stages where *V-SPELL* excels.

In conclusion, *V-SPELL* is an excellent program with a great deal of built-in flexibility. If you need spelling correction help, you cannot afford to be without a program that does what *V-SPELL* does. If you're constantly checking a desk-top dictionary, this program is for you. True, it is slower than Peachtree's Spelling Proofreader in the initial CHECK operation, but it is quicker in every other phase. And overall, when compared to PSP, total spelling correction time is substantially less. Some users may find a few annoying features but they are far outweighed by the program's ease of use, its general elegance and the powerful LOOKUP command.

We were told by CompuView that *V-SPELL* has been tested with the latest "version" of Valdocs 2.0 and is fully compatible.

As a final note, we were told by CompuView that *V-SPELL* has been tested with the latest "version" of Valdocs 2.0 and is fully compatible. Therefore, don't worry about your purchase becoming outdated when you finally give up. ■

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Poor Person Software
3721 Starr King Circle
Palo Alto, CA 94306
tel 415-493-3735
CP/M is a registered trademark of Digital Research

FEATURE-BY-FEATURE COMPARISON OF POPULAR SPELLING CHECKERS

Feature	V-SPELL™	The Speller™	Easy Speller II™	The Word Plus™	SpellStar™	CorrectStar™
Corrects Misspellings?	Yes	Yes	No	Yes	No	Yes
Lines of Context Displayed	1-20	23	24	1	8	9
Size of Main Dictionary	60,000	20,000	89,000	45,000	20,000	65,000
Supplemental Dictionary?	Yes	Yes	No	Yes	Yes	Yes
Alternate Spellings Displayed	Up to 60	None	None	4	None	1
"Wild Card" Spelling Look up?	Yes	No	No	Yes	No	No
Hyphen Help?	Yes	No	No	No	No	No
Full Document Hyphenation?	Yes	No	No	No	No	Yes
Error Free Hyphenation?	Yes	No	No	No	No	No
Dictionary Page Displayed	Yes	No	No	No	No	No
Price	$125	$49	$100	$150	$99	$145

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(additional words $1 up to total of 60)

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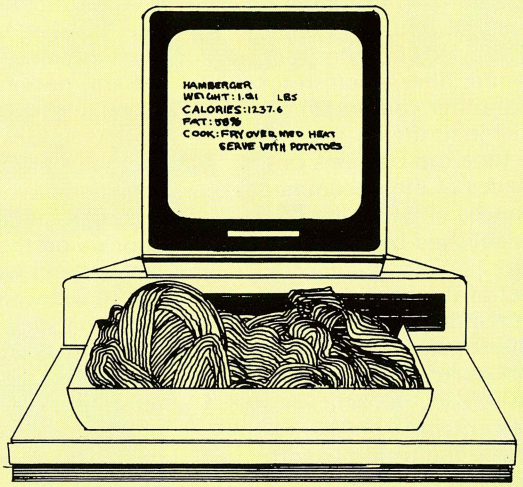
NUTRI-CALC

by Jodi White



SPEC SPOT

Product: *NUTRI-CALC & CALORIE MAGIC*
Type: Dietary and nutritional analysis software
Computer: QX-10
Operating System: CP/M
Required Peripherals: A printer is helpful.
Price: $129.95
Ease of Use: Very easy to use.
Performance: Performs well; some modification proves helpful.
Documentation: Brief but not well written.
Summary: These programs are extremely comprehensive and give the lay user an opportunity to study his or her own nutritional needs. Adding foods not found on their list does present a problem.
Manufacturer:
Oakwood Publishing
1335 W. 134th Street
P.O. Box 3934
Gardena, CA 90247

Almost daily we receive some new dictum through the media warning us to modify our diets or face the risk of cancer, heart disease, osteoporosis, and a host of other equally unpleasant conditions. As a diabetic and a health fanatic, I note these ubiquitous warnings with a seriousness that many of them may not really warrant. Nevertheless, I am not alone; health consciousness is a catch phrase of the eighties. That's why the *NUTRI-CALC Dietary Nutritional Analysis* program caught my fancy.

I use my QX-10 for a variety of tasks. The promise of the *NUTRI-CALC* program to aid "in managing the diets for any number of people on an individual basis" and to "keep track of nutrient intakes" for people with special dietary requirements sounded promising. Another cumbersome task made simple through the use of a microcomputer?

Not, quite. But the program has lots of possibilities if the user makes a few modifications.

This program comes from the publisher with the TPM-II operating system already on the diskette and set up to boot automatically when it is placed in the drive. To get started, you make a working copy of the diskette using the "Copydisk" function in VALDOCS.

Two separate programs actually compose *NUTRI-CALC*. The first calculates the total nutritional intake of each person, as well as the average daily intake over a 1 to 7 day period. To do this, the user enters the food code numbers in the database corresponding to the particular foods he or she has eaten in a certain number of days. The program then calculates the calories, protein, fat, vitamins, and other nutrients contained in the particular diet entered. The listing is easy to read and the graph illustrating the nutrient percentages met by the food entries of the Recommended Daily Allowances set by the government are clear and helpful for those concerned about meeting daily requirements and comparing one day's diet with another.

The program calculates the calories, protein, fat, vitamins, and other nutrients contained in the particular diet entered.

Finding the correct food code number to enter, however, is no easy task. The documentation suggests that the user enter a <?> followed by <return> when the prompt asking for the food number to list appears on the screen. The screen will then display a list of the food categories. The user selects the appropriate category and presses <return>. All foods in the category are then displayed and the user chooses the number corresponding to the type of food he has eaten. An example might be: 100:EGG, HARD COOKED, NO SHELL.

After choosing number 100 the program then asks for the amount, to which the user responds with a number or a fraction. The prompt requesting a food number to list again appears on the screen and the user once again goes through the tedious process of scanning the categories, choosing one and finding the appropriate food. This process is cumbersome and can be alleviated by listing the 730 generic and 143 brand name products in the database on the printer. You then have a 21 page list to search through each time you want a new food.

The problem comes when the food you are searching for is not on the list. This happened a lot with me. I eat such strange concoctions as broiled fish, tuna packed in water and dry roasted nuts. The database contains tuna in oil, breaded and fried fish and nuts roasted in oil. It also contains some rather odd entries such as "grapefruit with peel" and "watermelon wedge with the rind." Scanning the documentation leads one to believe that the user can easily modify or add foods to the existing program list. Believing this assertion I attempted to add "tuna packed in water" to the database.

I erroneously thought that I could use the nutritional components of the tuna printed on the back of the can, enter this data and individualize the program so that I could get an accurate account of my nutrient intake. As it turned out, the program uses a detailed nutritional analysis

and requires that the user know, in grams and milligrams, the amounts of such items as: fat, saturated fat, carbohydrates, calcium, phosphorous, iron, potassium, fiber, cholesterol and a host of other components not readily available to the lay user. The back of the tuna can contains only the percentages of the Recommended Daily Allowances of particular nutrients established by the government.

This aspect of the program makes it difficult to execute another function: entering a personal recipe to calculate its nutritional components and contribution to daily nutrient intake. If the recipe contains ingredients not in the database, the user must add the ingredients to the database. To do this, one must know the detailed nutritional components. In true Catch-22 style, you can't accurately assess your nutrient intake unless you already know, in detail, the nutrients contained in some of your "intake."

A call to Oakwood Publishing was helpful. They suggest that the lay user (i.e. not the professional nutritionist responsible for the diets of hospital patients, etc..) alter the program to fit individual needs in one of two ways. The easiest way is to add foods normally eaten and fill in as many nutrients as you can based on your knowledge of calories, fat, certain vitamins etc. usually listed as nutritional components on certain foods. The problem here is, when *NUTRI-CALC* computes your daily intake, it won't be as accurate as it would if you knew the exact components of the foods you want to enter.

The other possibility is to go to the library and research common foods in your diet in books like; *Manual of Nutritional Therapeutics,* by Alpers, Clouse, and Stenson (Little, Brown and Company, Boston/Toronto), or various publications put out by the United States Department of Agriculture. These books are readily available and a quick trip to the library allowed me to add various foods to the program listing without too much hassle. There is space for 178 items or recipes to be added.

This program calculates the ideal caloric intake for you.

CALORIE-MAGIC is the second program contained in the *NUTRI-CALC* system. This program calculates the ideal caloric intake of each person based on sex, desired weight goal, and activity level. It will also provide a weekly schedule for losing or gaining weight.

After the introductory screens, the user is asked to supply information such as name, age, sex, height, weight, desired weight, and hours spent in various activities, he or she simply presses <Y> in response to the question regarding other activities.

A quite detailed list of activities appears on the screen. Exercise fanatics and workers around the house will want to fill in their time spent on such activities as: cycling, racquetball, running, skiing, weeding the garden, shoveling snow, and mowing the grass. Although the program will run without using the detailed activity list, it seems that a more accurate assessment of calorie consumption can be generated if the user takes the time to fill in this list.

After entering the data, the ideal weight is calculated for the individual based on age, sex, height, and body frame. If weight gain or loss is desired, the user then enters the number of weeks over which the change is to take place. The program then calculates the required change in the number of calories consumed daily in order to affect this change in the desired amount of time. The program contains a warning that anyone who is trying to lose more than 10% of his current body weight should consult a doctor first.

The person concerned about weight loss or gain might want to do the *CALORIE-MAGIC* portion of the program first then complete the *NUTRI-CALC* program to assess nutritional intake and come up with a healthy diet with the desired number of calories to lose or gain weight. The two programs work well together.

Oakwood Publishing has focused on the health consciousness of the American public by publishing a nutritional guidance program. The programs are extremely comprehensive and give the lay user an opportunity to study his or her own nutritional needs, devise ways to achieve an ideal weight, and design activity levels to assist in burning up calories. I'm not sure how useful this program would be the professional but I do know that it allows the lay person to analyze and learn about individual nutritional needs in a way that wasn't possible previously, unless one went to see a physician or a dietician. ■

Disk of the Month

EC-9 This month's volume features the Mini-Bulletin Board System. This program is a small BBS compared to many other public domain BBS's, however, it is a good program to use if you are interested in operating a bulletin board program and you have never done so before. All of the necessary software to operate this BBS is contained in the MINI-BBS.LBR file. **To order the Disk of the Month, please send $15 to the EpsonConnection, P.O. Box 14027, Detroit, MI 48214, Attn. Disk Service Dept.** Please be sure to indicate the disk order number (EC-9) with your payment. Other programs included on this disk are as follows:

DE-LBR.COM	- Utility to extract files from library files.
READ.ME	- Documentation on the EC disk.
FONENAME.BAS	- MBASIC program that converts phone numbers to words.
BABYCASS.BAS	- MBASIC program that creates cassette tape covers for your tape collection.
WEEKDAY.BAS	- MBASIC program that displays your life statistics.
BURNOFF.BAS	- MBASIC program that compute the hours of exercise required to lose an x amount of pounds or calories

Disclaimer: All of the programs and documentation on this disk are known to be public domain and no warranties are expressed or implied. There are no guarantees with public domain software. All of the programs have been tested on the Epson QX-10, and are known to run. Public Domain programs are programs written by other users, for public use at little or no charge, other than the charge for mailing and materials. **Note:** We imply no similarity, or advise any comparison, between public domain software and software that is commercially produced. A beginning knowledge of CP/M is also recommended to utilize this software.

GIVE YOUR PRINTER A FACELIFT.™

Your printer manual probably shows a lot of faces that the printer is supposed to print. With lots of complicated instructions you don't have time to learn.

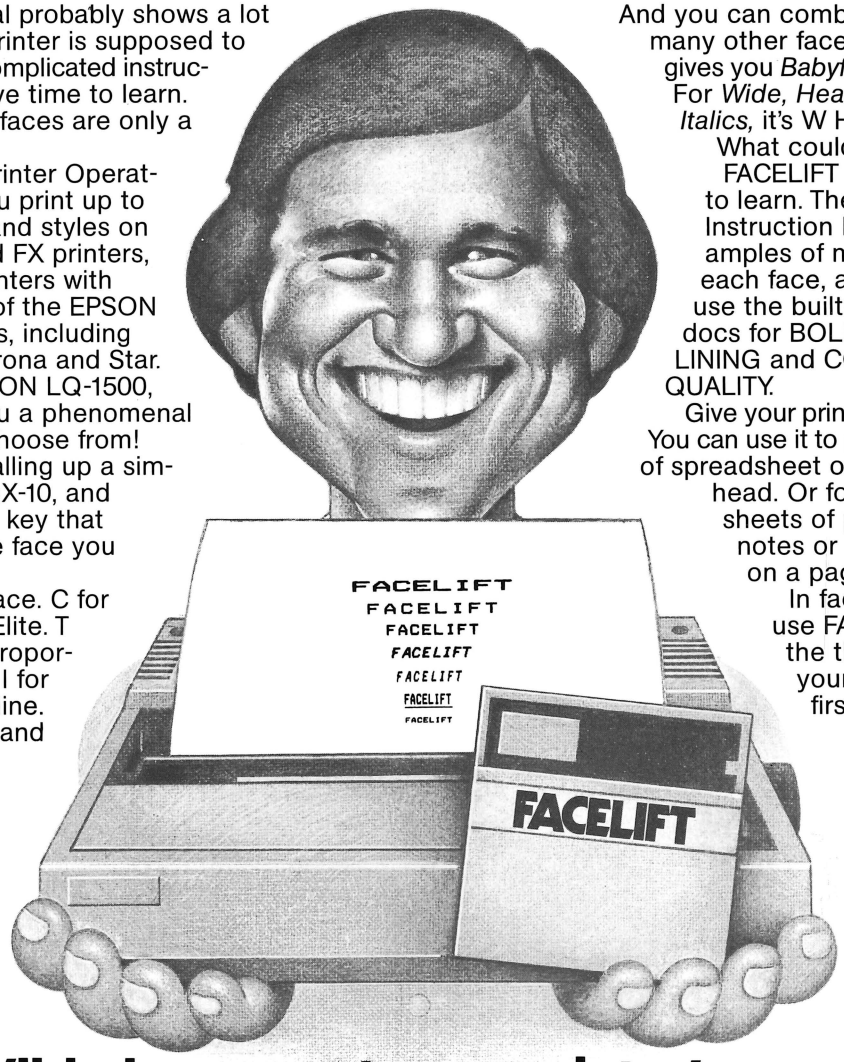
Well, now those faces are only a typing key away.

The FACELIFT Printer Operating System lets you print up to 92 different sizes and styles on the EPSON RX and FX printers, the EPSON MX printers with Graftrax, and any of the EPSON compatible printers, including Okidata, Smith Corona and Star.

On the new EPSON LQ-1500, FACELIFT gives you a phenomenal 416 typefaces to choose from!

It's as easy as calling up a simple menu on the QX-10, and pushing the typing key that corresponds to the face you want.

Like B for Babyface. C for Condensed. E for Elite. T for Trimline. P for Proportional. W for Wide. I for Italics. U for Underline. D for Doublestrike and H for Heavy.



And you can combine the above to get many other faces. For example, B I U gives you *Babyface Italics, Underlined.* For *Wide, Heavy, Doublestrike Italics,* it's W H D I.

What could be simpler?

FACELIFT takes only seconds to learn. The clear, easy-to-read Instruction Manual gives you examples of margin settings for each face, and tells you how to use the built-in commands in Valdocs for BOLD, ITALICS, UNDERLINING and CORRESPONDENCE QUALITY.

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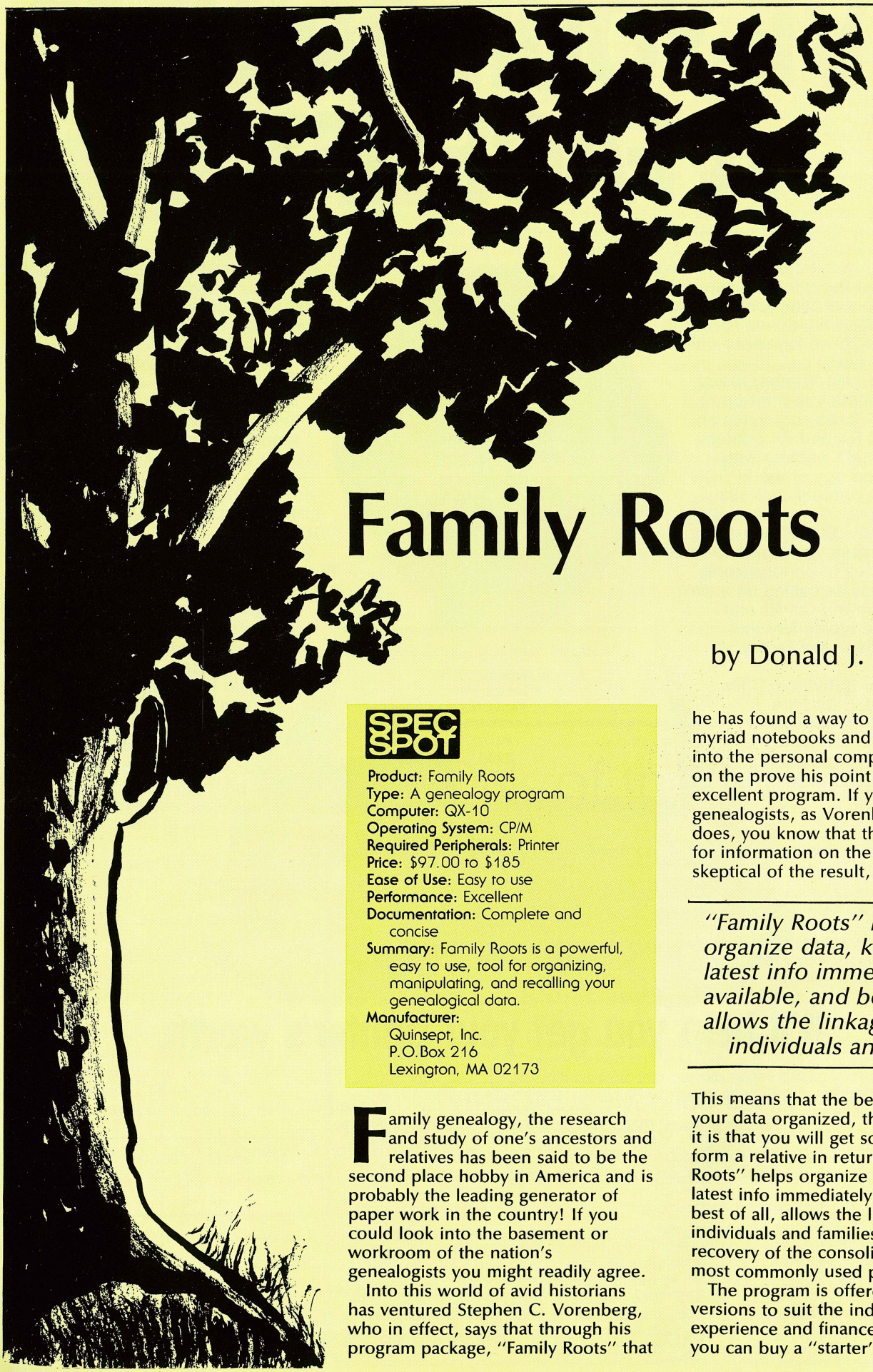

Family Roots

by Donald J. O'Toole

SPEC SPOT

Product: Family Roots
Type: A genealogy program
Computer: QX-10
Operating System: CP/M
Required Peripherals: Printer
Price: $97.00 to $185
Ease of Use: Easy to use
Performance: Excellent
Documentation: Complete and concise
Summary: Family Roots is a powerful, easy to use, tool for organizing, manipulating, and recalling your genealogical data.
Manufacturer:
Quinsept, Inc.
P.O.Box 216
Lexington, MA 02173

Family genealogy, the research and study of one's ancestors and relatives has been said to be the second place hobby in America and is probably the leading generator of paper work in the country! If you could look into the basement or workroom of the nation's genealogists you might readily agree.

Into this world of avid historians has ventured Stephen C. Vorenberg, who in effect, says that through his program package, "Family Roots" that he has found a way to empty those myriad notebooks and bits of data into the personal computer and goes on the prove his point through his excellent program. If you understand genealogists, as Vorenberg surely does, you know that they are thirsty for information on the one hand and skeptical of the result, on the other.

"Family Roots" helps organize data, keeps the latest info immediately available, and best of all, allows the linkage of individuals and families.

This means that the better you have your data organized, the more likely it is that you will get something useful form a relative in return. "Family Roots" helps organize data, keeps the latest info immediately available, and best of all, allows the linkage of individuals and families, and the recovery of the consolidated data on most commonly used printers.

The program is offered in several versions to suit the individual's experience and finances — that is, you can buy a "starter" package and

later, as you file grows, add to your program until you have the entire "Family Roots".

The program comes in a three ring binder with stylish logo and descriptive title and the CP/M version is on one floppy disk. It needs the usual processing before booting and that is simply making a copy, and transferring the CP/M2 system, MBASIC.COM (MS), and SUBMIT.COM to the copy. I also engaged the system to autoboot with the command SUBMIT FR. I used the CP/M version B2.25 so the preparation took a minimum of time on our Epson QX-10.

While the CP/M disk was close by, I formatted a blank disk and left it in "B" drive, placed the new system disk in "A" drive and executed a cold boot. After a short time the title page appeared and the date was requested. Through the use of the Configure utility appearing on the first menu, the printer, disk drives, display, and date mode are selected and fixed in the program. The next module, CREATE, partitions the data disk and prepares it for storage. At this point it would save time if all contemplated data disks were copied on the CP/M COPYDISK utility since use of CREATE takes a little longer. With the default CONFIGUR settings, the disk was prepared to accept over 1000 records which I found more than ample for my records.

The next module for use is EDIT and logically you are given a choice of editing names or records. Since none exists at this point, you should select NAMES and prepare to enter as many names as you have available. These will go into only four fields: last name at birth, first name(s), married last name, and title (user determined). It seemed strange to omit the all important dates at this time but this step prepares a list of names with a discrete number for each person. The resulting list can be printed, edited, and used in the next step. You should enter yourself, spouse, children, parents, and close relatives since knowledge of these people will help test your work.

Two passes through you source documents is suggested for data input. On the first pass you enter names only. The number assigned by the program should be placed on the source data. On the second pass you can check the names for accuracy on the screen and enter the associated dates into the record. Now for the easy part, you now form linkages of parents, children, and spouses by merely entering their numbers at the prompt. Skill and care in these entry phases pays dividends in the printouts!

If you used CONFIGUR properly you will find that type style and size is automatically selected for the CHARTS to be printed.

If you used CONFIGUR properly you will find that type style and size is automatically selected for the CHARTS to be printed. Output is chosen form a large menu and data is produced in an orderly fashion and in accordance with standard genealogical protocol. This is the section of the program that produces pedigree charts and blood line descendents of selected individuals.

SHEETS is the module that produces family group sheets and summaries of data on individuals. These are useful in answering queries from relatives and soliciting answers, updates, and corrections.

You may desire to list your individuals alphabetically or by their assigned number. You may wish to see a list of only one family surname or make a "Soundex" search of the file. These choices and others are accessed through LIST.

SEARCH is the module for the statistician. How many of your ancestors had the same first name, how many died in February, what percentage lived in Baltimore? I could hardly wait for the file to build up so I could experiment!

This program is very liberal in its ability to store data from those little pieces of paper containing field notes. If you want the notes to print on the family group sheets, there is a place in EDIT to do so. Longer files such as obits, newspaper accounts, letters, oral interviews, etc. are candidates for the TEXT section. Material stored in this area can be on separate data disks, independent of other material with practically unlimited storage capacity.

I wish I had seen "Family Roots" in the CP/M version when I was shopping for a genealogy program.

I wish I had seen "Family Roots" in the CP/M version when I was shopping for a genealogy program. It is written in BASIC and really shows what BASIC and the "8 bit" computer can do in the hands of competent programmers. It is impressive to be able to store ten years work and know that it is safe — while retaining the options to manipulate the data for printing in numerous ways as your experience with the program increases. That is the strong point of the program — it gives you so many options for organizing your files and so many ways to recover them. ■

The program gives you so many options for organizing your files and so many ways to recover them.

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(902) 582-7016

Donald O'Toole and his wife Shirley, are both members of the Topeka Genealogical Society; Shirley is Publishing Chairman for the society, and Don is a frequent speaker on the role and uses of the micro-computer in genealogy. The O'Toole's live in Topeka, KS near their four children and five grandchildren.

WANT TO SEE YOUR HX-20 OUTPERFORM ANYTHING IN ITS CLASS?

CompuPak Inc. is proud to introduce a program that allows the HX-20 to **do more** than all the other software available for it combined. **PowerPak!**™

PowerPak is a ROM based program which will handle integrated word-processing and communications applications while giving the user a flexible and friendly interface to all of the HX-20's unique capabilities.

PowerPak's distinguishing features include a tape operating system, graphic (sideways) printing, multiple files of any dimension, full word processor (including replace, block operations, re-formatting), file uploading/downloading, sophisticated communications and best of all, software expandibility

PowerPak will let you keep up to 64 files (of any dimension) in memory, eliminating the need to save and load small files. Using the tape drive has been reduced to the simplicity of a disk drive thanks to **PowerPak's** unique Tape Operating System (TOS). **You** don't have to worry about where files are saved, simply refer to the tape directory and let **PowerPak** take care of the rest!

Like to see the full width of virtual window on paper? No problem. If you specify **GRAPHIC** printing your built-in micro-printer will present you with pages of up to 250 columns (by printing sideways!). All page separators are automatically included and **PowerPak** will even let you change print fonts.

But this is only the tip of the iceberg, what makes **PowerPak** even more versatile is the provision for expandibility and future applications. Data Collection, Order Entry, and Inventory Control are all currently available as separate modules all of which use the ROM's features. This is done by letting the **PowerPak** program act as an operating system that takes care of the tasks that are common to all of these programs.

This means that special needs can be easily satisfied through customized software. And because these programs all run in conjunction with **PowerPak's** lightning speed machine language, they run fast and consume minimal memory.

Want to see your HX-20 out-perform anything in its' class? **POWERPAK!**

CompuPak's support for the HX-20 extends beyond the development of **PowerPak**, with the introduction of the **Ambassador**™, a package which used with **Powerpak**, further enhances the HX-20's versatility and mobility.

The **Ambassador** (seen above) consists of an HX-20, an expansion RAM, a CX-20 modem, a female DB-25 serial printer port and a complete telephone, all in a pre-wired unit which fits in a custom designed briefcase from Renwick of Canada.

The modem is a direct connect or acoustic coupler with the features of a smart modem. The high quality telephone will connect you with any name in your address directory and will re-dial upon request.

The mobility of the **Ambassador** combined with **CompuPak's** easy to use order entry, inventory or application programs* makes it the perfect tool for any salesman or professional on the move.

*customized software extra

DEALER INQUIRIES WELCOMED

PowerPak FEATURES:

BASIC FILE OPERATIONS:

- create a file
- select (edit)
- rename
- save
- delete

BASIC TAPE OPERATIONS:

- load a file
- merge a file
- kill a file
- read a directory

EDITOR FEATURES:

- screen and cursor movement:
  cursor up,down,left,right
  screen up,down,left,right
  word left,right
- insert,delete (character left,right)
- delete (word left, right)
- cancel line
- erase line
- insert line
- center line

BLOCK OPERATIONS:

- block delete
- block copy
- block move
- block print

PRINTING FEATURES:

- print normally
- print sideways
- print externally
- print a block, entire file from cursor to end
- variable print format including line spacing, print width, word wrap

MISCELLANEOUS FEATURES:

- separate file areas (text,index,shed,comm)
- search for text
- replace text
- repeat search or replace
- XON-XOFF protocol
- high speed data transfers
- communications merge
- file upload download
- file re-formatting
- variable wordwrap
- inverse video
- blinking inverting cursor
- audible indication of flags,errors etc.
- repeat next command continuously (at pause value)

SYSTEM CONFIGURATION PARAMETERS

- all RS-232 protocols available
- all screen formats available
- programmable, graphic, foreign characters
- external (Epson) printer support

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Montreal, Quebec H3S 1C1
(514) 735-0501

The Book of Change

I CHING

By Franc La Clair

SPEC SPOT

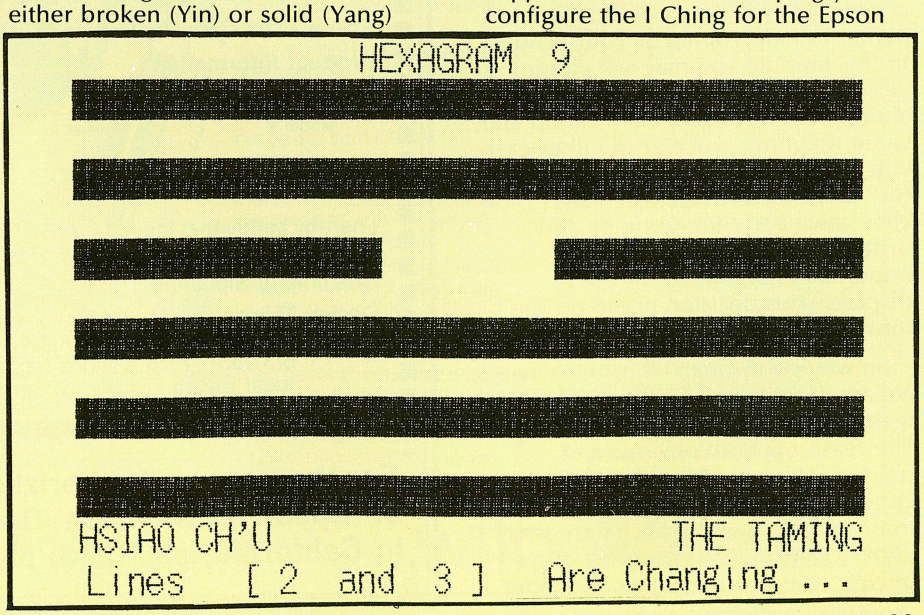
Product: The Book of Change
Type: Unique Personal Decision Manager
Computer: Epson QX-10
Operating System: TPM II or CP/M
Peripherals: Printer optional
Price: $39.95
Ease of Use: Very simple menu driven program
Documentation: Good
Summary: The Book of Change or I Ching is a unique interactive personal decision manager based on Chinese philosophical tenents 5000 years old.
Manufacturer:
Software Country
270 North Canon Dr.
Suite 1297
Beverly Hills, CA 90210
213-278-8450

The computerized version of The Book of Change, or I Ching by Software Country is a fascinating adaptation of the printed version and seemingly just as paradoxical. It is as old as the ancient sages of China and as new as the computers on which it runs. It is both simple and complex and full of the mystical polarity of life's change. It can be as powerful in aiding one in making choices and decisions as the most powerful spreadsheet or database program.

About 5000 years ago Chinese wisemen observed and recorded the constant change of natural phenomenae; heaven and earth, lake and mountain, fire and water, and thunder and wind. They codified this into a binary system of solid and broken lines to represent the polarity of nature, Yin and Yang, and the interaction of the elements on each other and all things around them. Most of us think of this polarity in terms of "good" and "bad", but it is more accurately described as light and dark, rigid and flexible, Sun and Moon. Each of the elements were drawn as trigrams, a set of three lines either broken (Yin) or solid (Yang) representing the characteristics of the element. As time went on verse and prose was written to interpret each trigram. Eventually the eight trigrams were squared into a set of 64 hexagrams (six line sets) comprising the current Book of Change.

The usefulness of the hexagrams in either the printed or computerized version of the I Ching is in depicting the present at any given instant, and the possibilities or alternatives for the future based on the fact that all things change, a hexagram for the present, and one for the future.

The documentation and supplement is clear in helping you configure the I Ching for the Epson



QX-10 using the Valdocs SETUP program. After booting Valdocs and configuring the program, place the copy-protected I Ching diskette in the right drive and run ICHING.COM using MENU from Valdocs. Throughout the program you have the option of filing (saving) or printing the session or doing neither. The main menu presents you with five options, 1) Consulting the Oracle, 2) View a Specific Hexagram, 3) Review a Filed Program, 4) Make a Decision, and 5) End this Session.

Consulting the Oracle involves framing a "what if" rather than an "either, or" question silently or by typing it in. Word wrap helps in typing, but control-H must be used rather than backspace for correcting errors in typing. Once you have posed your question press MAR REL (escape) to begin the process of "casting" your hexagram. This is similar to rolling dice or casting tea leaves, in that you are stopping the forces of the universe at a point in time to ask "given what is, what might be?" The program then selects the six lines representing the current nature of things and pairs it with a hexagram of future alternatives.

After each hexagram is cast by pressing the SPACE BAR, a graphic display is generated on the screen along with an explanation of each pair of trigrams (set of three lines) and accompanying verse. The subtle thought provoking interpretive prose follows for your consideration in deciding upon a course of action for each hexagram. Pressing a Control-B moves back through the text for review. You may file or print the session following the menu, or bail out of the session completely by pressing Control-Q.

Once presented with the alternatives you may use the Decision Maker to help you focus your actions. In this module you may ask either yes/no questions or choose between alternatives through a clarification and value weighing process. In either case you are prompted to list "reasons for" and "reasons against" each alternative and then value or rank order your reasons in terms of importance. The program then displays your decision based on the information you provided.

So why go through all of this when we are capable and familiar with making decisions for ourselves now? The reason is both obvious and oblique. When making decisions we generally ask "what are the facts" and then make a logical choice based on current information that most of us believe will remain constant. Wrong! The I Ching shows us current information, "facts", and what aspects are changing and will change, valuable information that we often overlook, or perceive as "emotional" or "illogical". Often we do not force ourselves to prioritize or focus our ideas. The I Ching teaches discipline and balance. It requires us to balance our logical and intuitive aspects, look at positive and negative facts and feelings, and locate within ourselves both what is and what can be. Balance. Yin and Yang. It is a computerized binary based tool for decision making.

This little $39.95 package is a time tested decision manager program and a bargain to boot. It is easy to use, challenging, and provocative. The documentation is clear and concise, taking only a few minutes to read. Screen displays of graphics and text are appealing and well designed. The Book of Change is worth the small investment.

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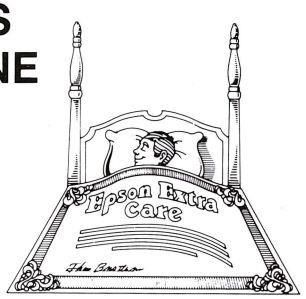

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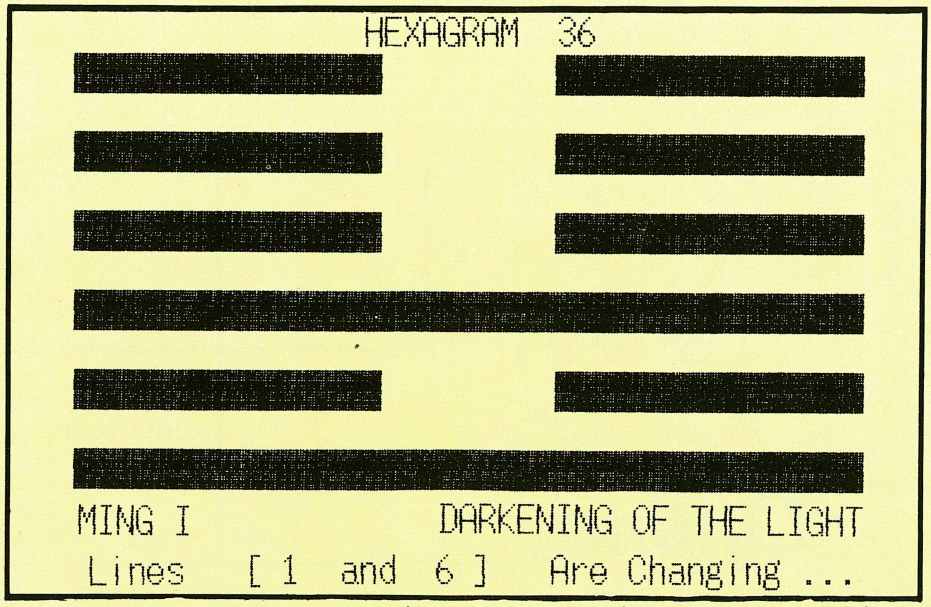


Carolyn posed two questions to the Oracle as a test of this program. The following hexagrams and phrases are excerpts from the response.

Question 1: What if I remove my Valdocs data disk without doing a Control M?

Response: Hexagram 36 "Ming I"

Commentary from the Oracle: "There are elements that would now see you undone." "... it means that while exercising caution and keeping a low profile, you hold steadfast to your resolve and pursue your aims. This period is fraught with danger. You must learn to understand the nature of evil."

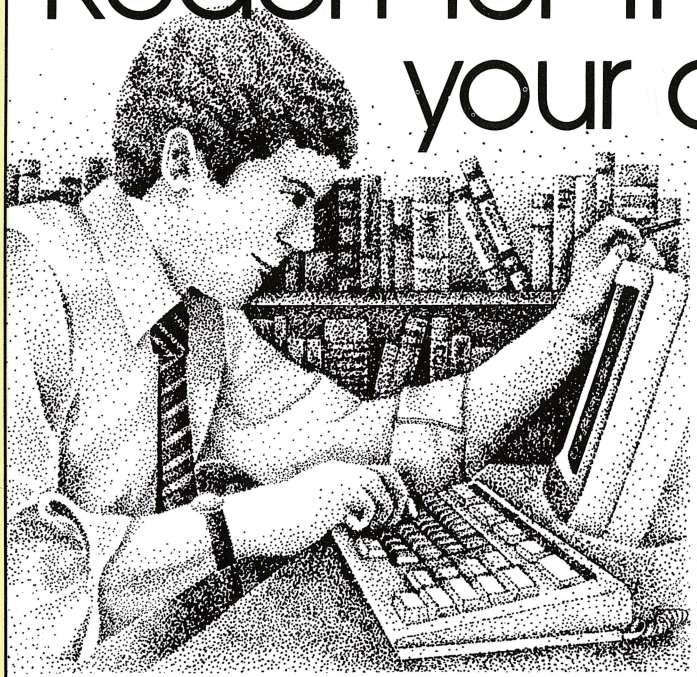
Question 2: What if Valdocs 2 doesn't get released in April?

Response: Hexagram 9 "The Taming"

Commentary from the Oracle: "The forces now gathered present minor obstacles to the accomplishment of larger goals. Although there is no really serious impediment to your continued progress, you will find yourself often blocked by a recurrent pattern of lesser events that seem to conspire to halt or delay you. Trying to force things to happen will not work for you now. This period is best spent developing your personal resources so that when things begin to move forward more smoothly, you will be prepared to take advantage of the opportunity. Given the conditions suggested here, your best course is a holding pattern. Restrain your impulse to embark on anything major. Work through this frustrating time by developing the patience and insight you require for the gentle exertion of your influence on the situation, your surroundings, and your associates. This will ultimately create progress and success. Restraint and caution will serve you best."

Note: Judge for yourself from these responses. The program certainly seems to be on target with these two. ■

Reach for the height of your craft...



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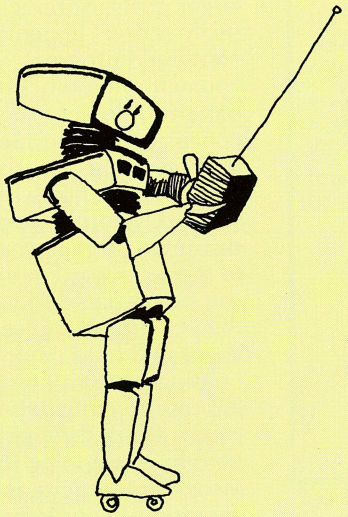


Online

by Bob Hermann

Last April CompuServe opened the Electronic Mall, a service that offers the convenience of shopping-at-home, as well as information on everything from life insurance to computers. Going shopping online has many similarities and advantages over a conventional shopping mall. In some respects it is more like mail order shopping. There are also some drawbacks, the first of which is a $25.00 per year cover charge just for entering.

Time and Money

Why go shopping online? The two prevalent reasons are the convenience, and the good prices available on a wide range of products. The demographics of CompuServe subscribers reveal that they are professional males in their 30's, often with great time constraints. The potential of being able to shop 24 hours a day, 365 days a year, without ever setting foot in a store, is very appealing. The products purchased online are distributed directly from the manufacturers themselves, therefore prices are often far below those found in retail stores.

The variety of merchandise available is a plus. Currently there are over 60,000 items in the online 'catalogue'. The shopper using this catalogue has two ways of finding particular products. You may shop by brand name and model number, or by the features of the product desired. The online shopper will commonly consult various suppliers, either by going into stores or using catalogues, to find the item desired. 'Window shopping' may be done if you have a good idea of what you want. Products are categorized by features, such as cost. If, for instance, you want to purchase your spouse a digital wrist watch (as appeasement for the inattention they receive due to the time you spend in front of that 'dumb computer') you choose two qualifiers, 'ladies / mens' and 'digital'; you may then further define your choice with a price restriction. Now you may browse through the items compiled to meet these requirements.

The Drawbacks

Not only do you pay the annual $25 to open the doors to the electronic mall, but also keep in mind that you are paying your regular online charges for all the time you spend browsing. There isn't any time to sit and have a cup of coffee. It will also take some time before what you have purchased is delivered, two to four weeks.

The consumer usually likes to see and touch the merchandise, as well as ask some questions concerning the product. This, of course, is not possible online and restricts the type of products that will sell online. The most popular online items are those that you don't need to see and / or touch, like books and records. Among the most frequently purchased products are electronic and computer items and merchandise that is hard to find at the corner drug store.

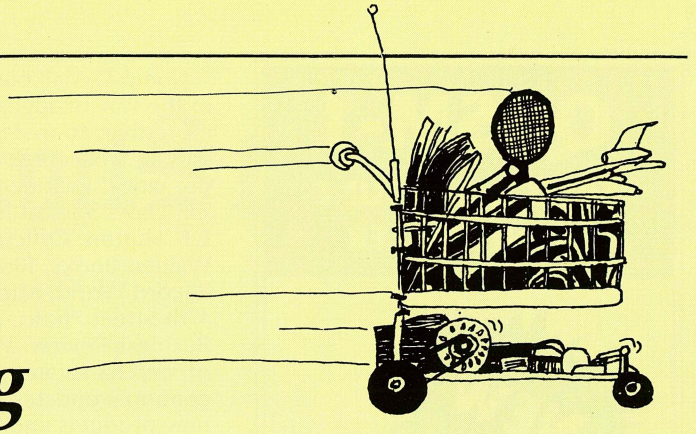
Let's Go Shopping

Sit back in your chair now and take a little jaunt through the mall. A first time user must have a Master Charge or Visa card to enter. Have your card available. Call up CIS (Compuserve Information Service) and at the first prompt enter: go cus <cr>. You should see:

Entering the Mall

As you enter the mall you are presented with an array of options.

1) Help & Information
2) Member sign-up/address change
3) Comp-U-Gram
4) Scavenger Hunt
5) Comp-U-Stakes Auction
6) The Comp-U-Store
7) Best Buys (Databasement)
8) The Home Furnishing Store
9) The Comp-U-Mall
10) The Drugstore



Shopping

Comp-U-Store

As you can see there are really two malls inside. Comp-U-Store is a service offered by Comp-U-Card International which is more or less a department store. Everything is under the same roof. All orders, method of payment (check, MasterCharge or Visa), and address information are handled together when you leave the store.

This service is also available on Dow Jones/News Retrieval, The Source, and several other networks. To access Comp-U-Store on Dow Jones, type "//store" at any location on the service. On The Source, type "cstore". The remarks below concerning Comp-U-Store system commands apply regardless of which telecommunications service is used.

The menu driven format of Comp-U-Store makes it easy to use, but there are several commands you should be aware of to avoid unnecessary online time (these are different from the commands of CompuServe itself).

Command	Action
HELP	Assistance at any time
MAIN	Return to the Comp-U-Mall Main Menu
END	Return to Comp-U- Mall Main Menu
BEGIN	Return to the start of a Section
DISPLAY	Display products selected
ORDER	Process stored orders
TOP	Go to the top of the shopping menu
BACK	Return to previous menu
EXIT	Leave the Mall

Note especially that using the CIS command "off" will NOT sign you off the system. It is easy to forget this and go round and round.

Now let's go get that watch I mentioned earlier. We'll go into the Comp-U-Store (option 6 from the Mall Main Menu). You'll then see:

CompuServe **Page CUS-1**
Comp-U-Store Shop-at-Home Service
1 Description of the Service
2 Browse Comp-U-Store
3 Membership Sign-up
4 Shop & Order

!

Let's go ahead and elect option 3 to sign up for the service. Just type a **3** after the **!** prompt. You are given the option of paying $25 for a 15 month membership or $40 for a 27 month one. Then your credit card info, name, address, and phone number are taken. (Twenty-five dollars never went so fast.) We are now back at the above menu, from which option **4** will open the mall doors.

(1) Shopping and Ordering
(2) Best Buys (Databasement)
(3) To process a stored order

!

Selecting number **1** we then see:

"Product Type
(LISt) for Product Listing"

If you've already visited the store (and are keeping a hard or diskcopy of previous adventures), you should have on hand the list of products. This would eliminate the need to scroll through menu after menu while the "meter is running," so to speak. For illustration, assume we do not have a listing of products. Proceed by entering **LIS**. See what happens.

#	Categories
1	Appliances
2	Camera's and Optical equip.
3	Cars, car stereo & tires
4	Tableware
5	Luggage
6	Sporting Goods
7	Stereo & audio equipment
8	Tv & video equipment
9	Other electronics
10	Computers & accessories
11	Miscellaneous

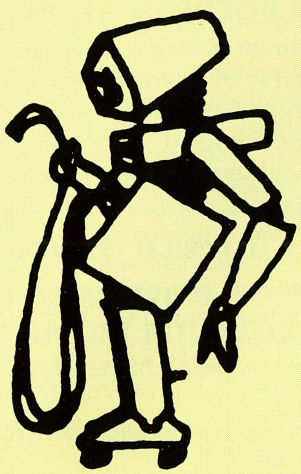
Enter a category #

All merchandise ordered from vendors comes with the manufactures' warranties in full effect. In addition, the Comp-U-Store Customer Service Department has an 800 number (800-562-8888). You may call with any questions and / or have any service problems resolved. Membership may be cancelled with a full refund by writing Comp-U-Card at: 777 Summer Street, Stamford CN 06901.

Comp-U-Mall

As we can see, it's a **good idea to have your printer on** while going through the mall, as you will often need to enter the descriptors from screens that you have scrolled through. Remember that you may go back to the previous menu by entering "BACK", or go to the top of the shopping menu with "TOP". Let's go back to the main menu by typing **main** and see what there is in the mall. Choose option **9** from here; we are then brought to the Comp-U-Mall main menu.

1) Newstand
2) Micro Mart
3) Book Bazaar
4) Photo Booth
5) Software Shop
6) General Store
7) Travel Agency
8) Record Emporium
9) Financial Market
10) Magazine Kiosk
11) Gardening Shed
Enter number of selection (or HELP):



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SOFTWARE & DOCUMENTATION

The provided software consists of two menu driven programs controlling speech and sound effects. Also included is a friendly user's manual.

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DEALERS INQUIRES INVITED

Comp-U-Mall currently offers more in the way of specialty shops, with more than 60 merchants. They are adding an average of one new shop per week. Included in this list are: Ziff-Davis Special Interest Magazines, E.F. Hutton, Official Airline Guides, Walden Books, Bloomingdale's, Record World, Microsoft Corporation, 47th Street Photo, and the Harvard Business Review. With such an array of merchants and products, and the continual updates and additions of new products and merchants, you need to have a method to keep up with what's happening. Choosing option **1** (Help & Information) from the Main Menu reveals an option 'New and Noteworthy'. This gives weekly updates of the system and also indicates any special offers and sales.

Let's take a quick look at what's in the Software Shop. Choosing option **5** from the Mall Departments Menu above, we see:

Software Shop

1 800-Software
2 CDEX Corporation
3 Commodore Business Machines
4 Grolier Software
5 Innovative Software
6 MCTel Telecommunications
7 Microsoft Corporation
8 Miracle Computing
Input a number or key <ENTER>
for more choices!

Let's take a closer look at 800-Software. Type **1** after the **!** prompt.

800 - SOFTWARE

1. Introduction
2. Order Information
3. Catalogue
4. Detailed Product Descriptions

! 3

Looking in the catalogue; option **3**, we see:

1 Apple	11 Epson
2 IBM	12 Telvideo
3 Kaypro	13 Eagle
4 Xerox	14 Superbrain
5 DEC	15 Vector
6 H-P	16 TI
7 Heath	17 Wang
8 Osborne	18 Radio Shack
9 Cromemco	19 Displaywriter
10 Sanyo	20 NEC

Last menu page. Key digit
or M for previous menu
! 11

4 articles selected

1. Display results
2. Search by category
3. Search by publisher
4. Search by Title

! 1

1. Home Accountant - CPM
2. DBase II 2.4 - CPM
3. MailMerge - CPM
4. WordStar 3.3 - CPM

Last menu page. Key digit
or m for previous menu.
!

As we see the CompuServe system syntax and commands are in effect here. Also note that, as is the case with many of the stores,there is not a voluminous amount of merchandise to chose from.

Order processing is accomplished as you leave the individual store, with some variation among the stores as to how orders are processed. When you leave a store you check out, just as you would in a Sears or K-Mart. An order summary appears on your screen reviewing what you have purchased in that store, allowing you to add or delete items. If you wish to void your order altogether, simply enter "exit". If you are buying something, you will first be asked to elect a payment method. Most Mall merchants accept VISA, MasterCard, or American Express. You will be asked for your name, address and shipping address, if different from your own. You are issued an order confirmation number which is your receipt. Your order is sent electronically to the merchant's CompuServe mailbox. He confirms your order with you via E-mail. Shipping, handling and taxes vary from merchant to merchant and are not included in your preliminary total.

The specialty shops here allow you to find hard to locate items. For instance, we have had several inquiries about where to obtain the "Instant Access Guide to Portable WordStar" and the "Instant Access Guide to Portable Calc + Portable Scheduler" (see Jan '85 EC pg 45). Both books may be purchased in the Bantam Book store in the mall.

You may enter any store in the Mall directly with CompuServe's "go" command. To do this you'll need a list of the respective call letters for each store. This may be secured by typing "go em-6" at any CompuServe prompt. I HAVE to go back and order that watch now, before I forget entirely, so we'll end our tour here. ■

FontStar

by Willie Ihlenburg

SPEC SPOT

Product: FontStar
Type: Font generator for use with WordStar.
Computer: QX-10
Operating System: CP/M
Required Peripherals: Printer
Price: $44
Ease of Use: Simple to use, quick to install.
Performance: FontStar works great.
Documentation: Well written. Better than average.
Summary: An excellent program at an affordable price.
Manufacturer:
MicroNova
R.R.#5
Canning, Nova Scotia
Canada

FontStar is a software program to be used in conjunction with the WordStar word processing program. It enables you to print your WordStar files in 16 different fonts (character print styles), not normally available through any of your printer commands.

FontStar enables you to print your WordStar files in any combination of 16 different fonts which you can also modify. In addition you can create any number of original fonts or characters of your own design.

In addition, you can modify any of these 16 fonts or, create any number of fonts or characters of your choice, store them on disk and use them for your document to be printed, either throughout, or in selected places. This means, not only can you create all your favorite math, chemistry or other scientific characters, but also those for foreign languages, from the simple European to the more complicated Middle-East or Far-East varieties.

Using FontStar

I have used FontStar with the FX-80 as well as with the LQ-1500 printer. Both printers produce good results. If, e.g., you are tired of the old standard, or correspondence-type print font of your FX printer, you are in for a refreshing change. With FontStar, you can choose between Helvetica, "American Typewriter" (a kind of IBM type style), Light, Bodoni, Micrograma Extended, Flash, Broadway, Sans Serif Shaded, OCR B, Commercial Script, Old English, Old German, plus several bold & italics variations of the above. FontStar also provides 65 special (foreign) characters, to be used with each of the 16 font styles.

FontStar also provides 65 special (foreign) characters, to be used with each of the 16 font styles.

Chances are, you will like and make use of at least half of the 16 fonts. Not only are these fonts good looking, but your FontStar document as a rule, is printed right-justified AND proportionally, a feature NOT available with Valdocs or WordStar alone. FontStar puts precisely the same amount of space between ALL the words in a right-justified line.

Create your own Fonts

It's easy to create your own fonts. Characters created with the help of the FGEN program print nicely. The screen will continue to show the normal character for the key used, so when you assign special characters to any of your keys, it would be a good idea to write a little reference card

It's easy to create your own fonts.

(similar to Valdocs') that reflects which characters you have assigned to what keys. I feel that this is not too much of a burden, considering the very reasonable price you pay for the program.

Easy to use?

The initial installation of the print program is quick and simple, i.e., if you know that your QX-10's operating frequency is 4 MHz. (The QX-10 book doesn't tell you this.)

You create your document as usual in WordStar, using most of WordStar's familiar commands. Come printing time, instead of typing "P" for the WordStar printing menu, you type "R" (Run a program), then "FS", which will bring up FontStar's own print menu. It includes almost all the print options you are used to in WordStar, plus the question for the type of font you want to use for this document. You can even specify rough draft printing in the selected font, for double speed. This is an important feature, because the standard print operation of FontStar consists of two passes for each line, cutting your normal print speed by about 50%.

If you want to change or insert special fonts, mid-stream in your file, you simply insert a double code before and after the passage to be changed, in the text. It may sound complicated when, e.g., for font type WC, you have to insert CTR-PW CTR-PC before, and CTR-PW after the passage. But on screen, all you will see is, WCtextW.

How much trouble is it to create a new character or font? Not difficult at all. You are provided with a large grid (matrix) on your screen, on which you set or remove, a number of asterisks, by pushing your numerical keys, the space bar or the right delete key, following a smart directional concept. When done, the asterisk chain will form the character. You can also call up an existing character and modify it which, usually, works faster than creating a character from scratch. Each new character or font is then stored on disk, and FontStar will pull it up and insert it in your printed document wherever you have typed the control code that identifies this font file.

(Continued on following page)

Drawbacks

Since FontStar, in the standard mode, prints with two passes of the print head per line, it slows down the process, compared with normal WordStar printing. This is, however; a lot better than Fancy Fonts six passes per line!

When super or subscripting, the elevated or lowered characters are no longer the reduced size, but the normal font size. It looks like the super and subscripting of daisy wheel printers. I discussed this with Peter Steele, the producer of FontStar. He recommended simply creating the desired smaller font yourself and then store it as a separate font file, to be called up by the appropriate codes for super or subscripting. This is similar to the approach used with Fancy Fonts.

Another small concern is that, when trying to print any text in a style other than right-justified and/or proportional, the copy will not look quite as good. FontStar is basically designed to be printed proportionally and right-justified.

The need for turning off these features will arise when you have to print text whose front, center, or right edge must line up vertically, e.g., when typing enumerated paragraphs. Here, the first text word in the line following the paragraph number, slips in or out of the left paragraph margin, due to the proportional print. We figured out that the overprint line command in WordStar can overcome this problem by starting to type the text a line below the paragraph number.

Peter Steele also incorporated an advanced feature in the disk he sent us: The ability to change line height (line spacing), using WordStar's dot command. This is a feature not normally available to users of WordStar that use dot matrix printers. Peter says this and other features will be included in a later version due around March. (It will carry the famliar name "2.0").

The Instructions

Among all the programs with which I've had to familiarize myself, it ranks better than average. The information you need is there, even though you sometimes have to read it over again. After all, we are touching print features here, that fall into the typesetting category.

The documentation (33 pages + 6 pages you print off the disk) is well written and contains surprisingly few mistakes. A few illustrations help you understand the different program features and to create your own fonts. There are pages with print samples of the 16 supplied fonts plus a special character chart, and even an alphabetic index.

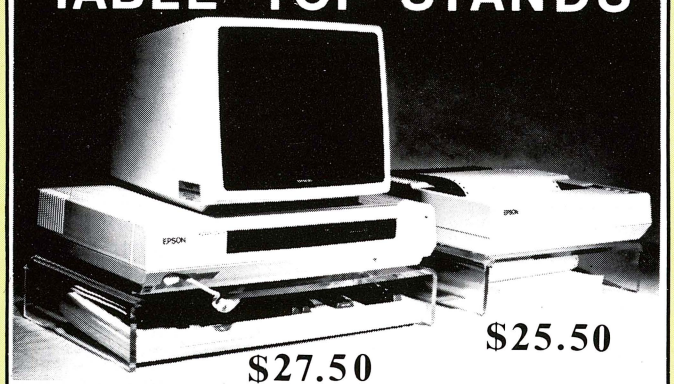
Among all the programs with which I've had to familiarize myself, it ranks better than average.

I think it's a bargain!

Summary

For only $44 you get a choice of 16 print styles, of which some clearly outperform your standard FX printer font. Improved text justification PLUS proportional printing give the text block a neater appearance. And, best of all, there is a simple program which allows you to create your own characters, the quick and easy way. The items that I call drawbacks, are either of minor significance or are going to disappear with version 2.0 (sounds familiar?). ■

TABLE TOP STANDS



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FONT DEMONSTRATIONS

XD - Broadway:

When a distinguished but elderly scientist states that something is possible, he is most certainly right. When he states that something is impossible, he is very probably wrong.
- ArthurC. Clark

XE - Sans Serif Shaded:

When a distinguished but elderly scientist states that something is possible, he is most certainly right. When he states that something is impossible, he is very probably wrong.
- Arthur C. Clark

XS - Old English:

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- Arthur C. Clark

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Houston, Texas
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24 Hrs. 7-days

*Brownsville, Texas
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24 Hrs. Sat & Sun

MIDWEST STATES

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10PM - 2AM Mon-Sun

*Wauwatosa (Milwaukee), WI
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12PM - 4PM M-Sun
6PM - 12AM M-Sun

Detroit, Michigan
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24 Hrs. 7-Days H.D.

Lake Zurich (Chicago), IL
312-438-6149
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Portage, Indiana
219-762-5620
6PM - 6AM 7days

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Harrisburg, Pennsylvania
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24 Hrs 7-Days

Philadelphia, Pennsylvania
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Book Review

The Epson QX-10 Getting Started Workbook and The Epson QX-10

Book: The Epson QX-10 Getting Started Workbook & The Epson QX-10 Getting Started Reference Package (1984)
Author: Michael Greer
Publisher: Epson America, Inc.

These two publications constitute a short self-study course for newcomers to the QX-10 and computers in general. The course is a combination of instructions and explanations of the basic interactions between software, hardware and the user.

The course is set up in modules. The reader is instructed to read a certain section of the Reference Manual and then return to the Workbook to reinforce what has been read by completing several recall exercises. This allows the reader immediate feedback on the degree of comprehension attained.

Starting with the physical setup procedures of the machine itself, the subjects included constitute a general coverage of all the Valdoc's modules, with no in depth discussion of any particular one. The reader is introduced to Valdocs (version 1.18) word processing, printing, file control, menus and the associated functions of the software, including a full explanation of the HASCII keyboard. The instructions are detailed and specific and usually include a picture of what to expect onscreen.

There is little coverage of any CP/M functions — the book offers only the minimal amount of 'technical' information necessary to operate the computer. In this respect the most useful section of the book is the Valdocs Task Summary Chart.Here the reader can easily determine the steps necessary to perform any of the elementary procedures described in the books.

These two books constitute an introductory course to the QX-10 and Valdocs Version 1.18. They are aimed at those for whom the idea of using a computer causes instant fear. The step-by-step, "see as you do" pictorial nature of instructions painlessly takes the most apprehensive newcomer through an initiation to computers in general, and the QX-10 and Valdocs, in particular. The reinforcement and feedback provided enhance the usefulness of the books. The course itself is well thought out and organized. ■

Shoppers Guide

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A compilation of tidbits, how to and what to manuals in 300K of Valdocs files for operating your own QX-10 more efficiently. Also contains instructions for application programs such as PeachTree Text, Mailing List Managers, PeachCalc, Telecommunication, CP/M, and TP/M references and useful utility programs such as DELBR.COM, USQ.COM, DEVAL.COM, UNERA.COM, etc. Published quarterly, $65 per year or single issue for $22.50 incl. shipping.

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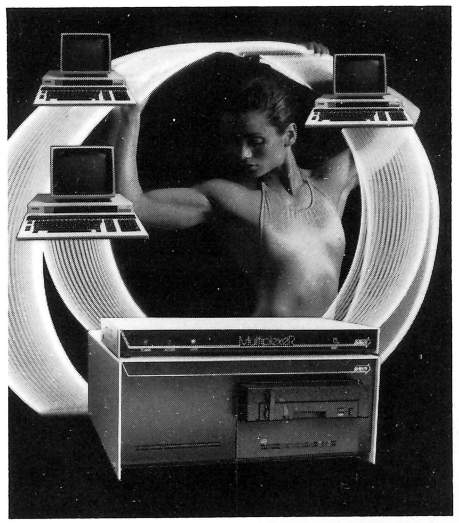

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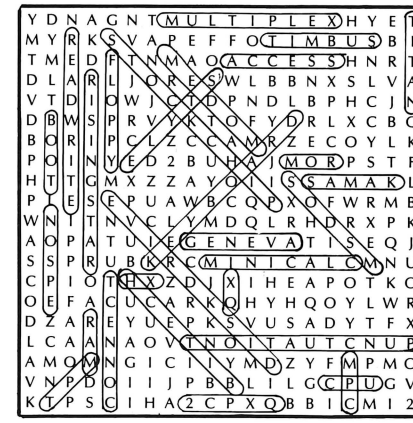
```
10 PRINT
20 REM "BURNOFF"
30 REM COPYRIGHT 1984 CHARLES K. MACKAY
40 PRINT "THIS PROGRAM OFFERS SEVERAL DIFFERENT EXERCISE PRESCRIPTIONS"
50 PRINT "TO BURN OFF POUNDS OR CALORIES, DEPENDING ON WHICH MEASURE"
60 PRINT "THE USER CHOOSES. THE CALORIE CONSUMPTIONS USED WERE CHECKED"
70 PRINT "WITH A NUMBER OF EXERCISE PUBLICATIONS AND DO NOT DIFFER"
80 PRINT "GREATLY WITH BODYWEIGHT, HEIGHT, OR SEX."
90 PRINT
100 PRINT "TO BEGIN, HIT ANY KEY..."
110 K$=INKEY$
120 IF K$="" THEN GOTO 110 ELSE GOTO 130
130 PRINT CHR$(26): PRINT "HI THERE--I'M YOUR COACH."
140 PRINT
150 PRINT
160 PRINT "DO WE WANT TO TALK POUNDS OR CALORIES--TYPE THE FIRST LETTER,"
170 PRINT "THEN HIT RETURN."
180 PRINT
190 INPUT; ">>> ",P$
200 IF P$="C" THEN GOTO 230
210 IF P$="P" THEN GOTO 650
220 PRINT "HOW MANY CALORIES DO YOU NEED TO BURN OFF?"
230 PRINT
240 PRINT
250 PRINT "TYPE THE NUMBER OF CALORIES, THEN HIT RETURN"
260 PRINT
270 INPUT; ">>> ",C
280 PRINT
290 PRINT
300 PRINT "THAT'S ";C/3600;" POUNDS OF UGLY FAT."
310 PRINT
320 PRINT
330 PRINT "WHAT ACTIVITY DO YOU WANT TO BURN THEM OFF WITH?"
340 PRINT
350 PRINT "        [R] RUNNING"
360 PRINT "        [J] JOGGING"
370 PRINT "        [S] SWIMMING"
380 PRINT "        [W] WALKING"
390 PRINT "        [B] BIKING"
400 PRINT "        [SB] STATIONARY BIKING"
410 PRINT "        [SC] STAIR CLIMBING"
420 PRINT
430 PRINT "TYPE THE CODE--IT'S IN BRACKETS--AND HIT RETURN."
440 PRINT
450 INPUT;">>> ",Q$
460 PRINT
470 IF Q$="R" THEN T=C/19.17
480 IF Q$="J" THEN T=C/9.58
490 IF Q$="S" THEN T=C/8.21
500 IF Q$="B" THEN T=C/6.39
510 IF Q$="SB" THEN T=C/3.2
520 IF Q$="SC" THEN T=C/7.67
530 IF Q$="W" THEN T=C/5.23
540 PRINT
550 PRINT "THE TIME REQUIRED IS ";T;" MINUTES OR ";T/60;" HOURS."
560 PRINT
570 PRINT "GET GOING, JOCK!"
580 PRINT
590 PRINT "TYPE S TO STOP, R TO TRY ANOTHER EXERCISE, M TO START OVER."
600 PRINT
610 INPUT;">>> ",Y$
620 IF Y$="S" THEN END
630 IF Y$="R" THEN GOTO 340
640 IF Y$="M" THEN GOTO 140
650 PRINT
660 PRINT
670 PRINT "TYPE THE NUMBER OF POUNDS, THEN HIT RETURN."
680 PRINT
690 INPUT;">>> ",H
700 C=H*3600
710 GOTO 310
```

—March Solution—



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» USER TIP «

Using ROM Subroutines on the HX-20 with MBASIC

by Jay Bond

Here is one way to set registers to execute ROM subroutines:

1. Load BASIC and set aside the memory necessary for your program. The following command sets aside 1000 bytes:

   MEMSET 3624 <RETURN>

2. Use the BASIC command MON to enter the monitor section.
3. Use the monitor's **S** command to enter codes.
4. Type a period to stop entering codes.
5. Use the monitor's **G** command to execute the routines.

The following example executes ROM subroutine FF64 to produce a tone for a certain duration:

```
86  OA    LDAA    #NOTE    ;load the note (note 10 in this
                           ;example)
C6  10    LDAB    #TIME    ;load the time (1.6 seconds here
                           ;into the B register
BD  FF64  JSR     $FF64    ;jump to the subroutine
39        RTS              ;return to the origin - this may
                           ;result in a trap if you did not
                           ;call from a subroutine
```

This is an example program:

```
10 TITLE "ROMSUBS"
20 MEMSET 3624
110 POKE 2624,&H86
120 POKE 2625,&H0A
130 POKE 2626,&HC6
135 POKE 2627,&H10
140 POKE 2628,&HBD
150 POKE 2629,&HFF
160 POKE 2630,&H64
170 POKE 2631,&H39
180 POKE 2632,&H00
200 EXEC 2624
```

After the BASIC program has run, memory looks like this:

```
0A40:  86 0A C6 10 BD
0A45:  FF 64 29 00 20
0A4A:  00 00 00 00 00
```


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THE SERVICE CONNECTION

by Martin Allen Lash,
Manager of Business Development,
Epson America Service Division

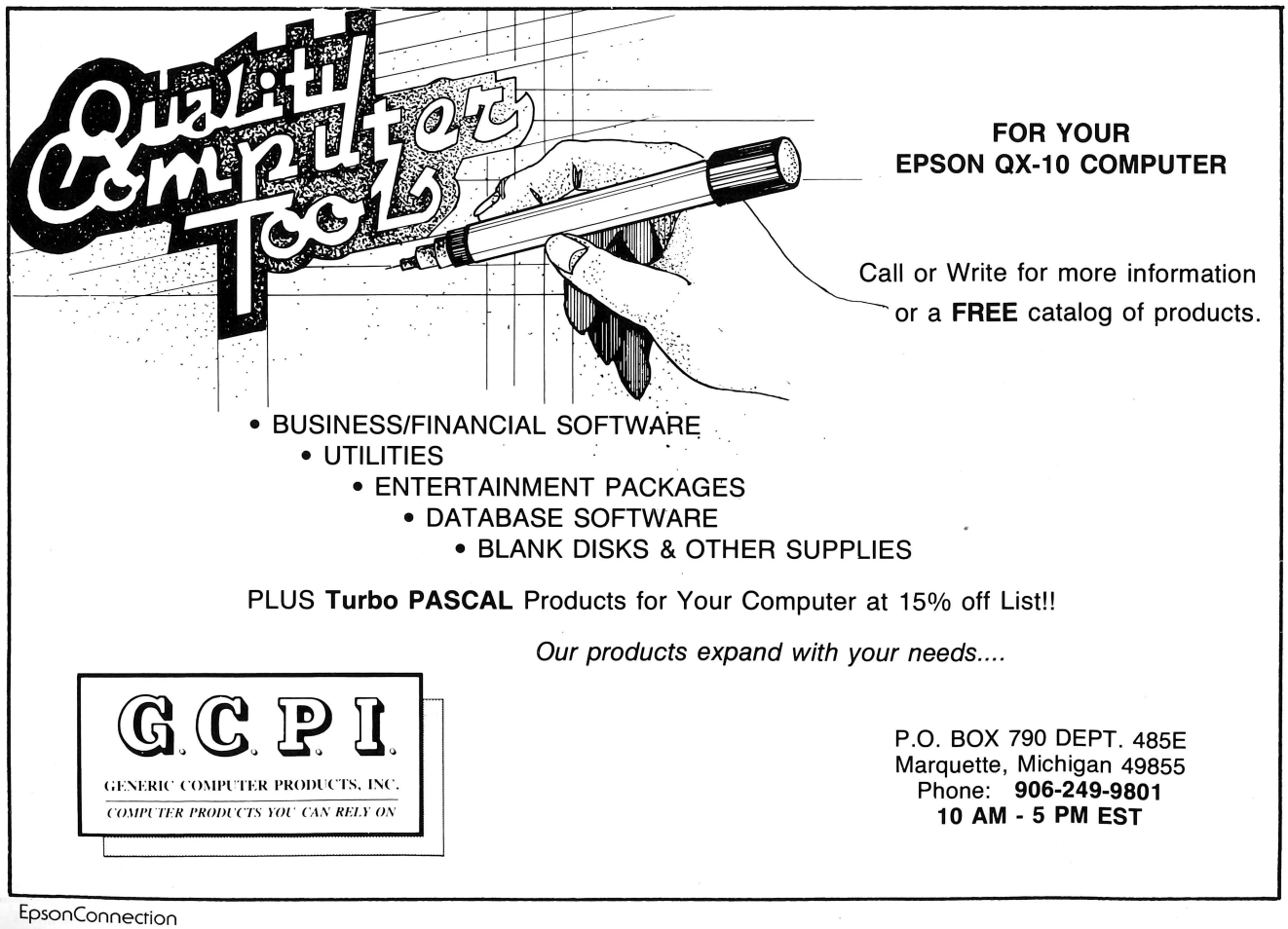
This monthly column will provide Epson owners with the opportunity to have their questions regarding service and preventative maintenance for any Epson product, answered by Epson America Service Division (EASD) personnel. All questions should be general in nature and beneficial to all Epson owners. Please send questions for the column to: Epson America Service Division, % EpsonConnection, P.O. Box 14027, Detroit, MI 48214-9990.

We, at Epson, hope that you will find this information both useful and interesting. In this first month's column, we will present an overview of each department within the Epson America Service Division.

MATERIAL CONTROL

The first department for which an overview will be provided is Material Control, or the Parts Department. In the past year, a new parts forecasting system has been implemented which has enabled EASD to provide accurate parts forecasts to Epson Japan. In turn, Epson Japan has decreased EASD order processing time from 110 days to 90 days. EASD and Epson Japan are committed to reducing this processing time, with our goal being 60 days.

Material Control has already reduced parts delivery time in the U.S. Orders for parts are filled in an average of two days for twelve Epson Distributors and other Epson customers. Part of the improvement in delivery time is due to a new computerized parts retrieval system operating in Torrance, California. The computerized system has been in operation since June, 1984, and has not only reduced processing time but helped lower costs. This reduction in costs results in lower consumer prices.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EASD recognizes the importance of an adequate spare parts supply and will continue to strive to improve our service to you.

ENGINEERING SUPPORT

Engineering Support is an important ingredient in EASD's ability to provide accurate, reliable hardware data. This data is supplied to several interdivision departments, Epson Distributors, and over 500 service centers nationwide. In the past year, the Engineering Support staff has been expanded enabling the department to supply data for technical information and manuals in a timely manner, often before products are released for distribution.

TECHNICAL PUBLICATIONS

A department working hand in hand with our Engineering Support Group is, Technical Publications. This department is responsible for producing all of our service manuals and other technical publications. In the past year, EASD, with the support of Epson Japan, has begun to produce technical manuals. The first product of the joint venture was the LQ-1500 Service Manual. Cooperation of this type allowed this manual to be completed before one unit was sold. In order to increase the quality of service manuals and reduce production time, over $40,000 was recently spent on additional composing equipment. Producing clearer, more concise technical infor-mation will continue to improve service to the Epson owner.

AUTHORIZED SERVICE CENTERS

The area of greatest concern to most equipment owners is the availability of local authorized product service. In September, 1984, EASD began the process of re-establishing the service center network. The result of this process is a new "Authorized Epson Care Service Center" network. All "Authorized Epson Care Service Centers" have parts in stock, repair any customer's unit, and honor our Epson Extra Care Agreements. In return for their commitment, they have our commitment to assist them in any manner possible.

EPSON EXTRA CARE

In September of 84, Epson Extra Care was introduced. Epson Extra Care is Epson America's extended service plan that offers Epson owners the option of purchasing additional service coverage on all Epson and Comrex products. The cost of the twelve month agreement is low and covers all parts and labor. **For a limited time, all Epson owners are being given the opportunity to register their equipment for Epson Extra Care with no pre-inspection.** Epson Extra Care is another way in which Epson America is striving for the utmost in customer service.

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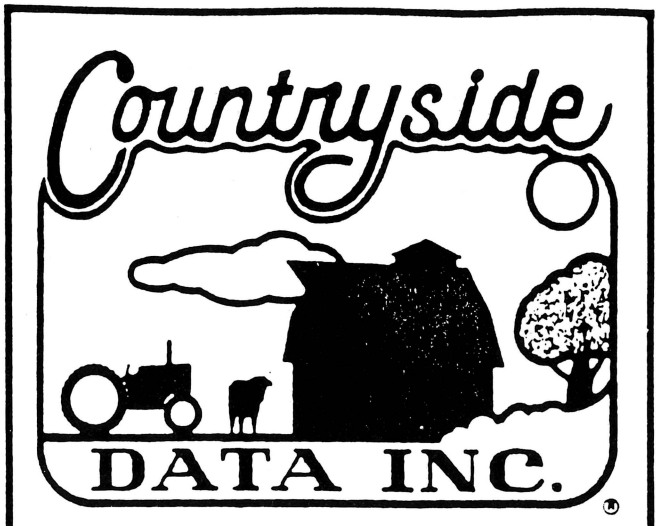
The latest in our strive for excellence is our new 800 service. Whether your questions relate to warranty service, Epson Extra Care, or the Authorized Epson Care Service nearest you, dialing 1-800-421-5426 will give you the opportunity to speak with trained personnel who can provide any information that is needed.

As you can see, EASD is succeeding in meeting our challenge; the challenge to make Epson America the "leader in service support". ■



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Rx for Px

by Bob Hermann

Continuous Alarm

The following program is from Terrence Ronson's Epson User International newsletter. It allows you to make the PX's alarm continuous, instead of a short beep lasting only a few seconds. Run the program under BASIC, creating an executable .COM file. Be sure the created file is on the A drive (the BASIC ROM is no longer necessary). Then use the name of this file as the wake string when setting the alarm (e.g. a:filename), and the PX will beep continuously until the STOP key is pressed.

```
10 REM Machine Coder
100 INPUT "Name of file to make (X:XXXX
    XXXX.COM).....";F$
110 OPEN "O",#1,F$
120 READ A$: IF A$ = "END" THE GOTO 170
140 A = VAL(A$): PRINT A
150 PRINT #1,CHR$(A);
160 GOTO 120
170 CLOSE #1
175 END
200 DATA "14"
210 DATA "54"
220 DATA "42"
230 DATA "01"
240 DATA "00"
250 DATA "06"
260 DATA "00"
270 DATA "09"
280 DATA "34"
290 DATA "31"
300 DATA "01"
310 DATA "34"
320 DATA "23"
330 DATA "01"
340 DATA "00"
350 DATA "00"
360 DATA "00"
370 DATA "14"
380 DATA "02"
390 DATA "17"
400 DATA "00"
410 DATA "01"
420 DATA "205"
430 DATA "00"
440 DATA "00"
450 DATA "14"
460 DATA "02"
470 DATA "17"
480 DATA "00"
490 DATA "02"
500 DATA "205"
510 DATA "00"
520 DATA "00"
530 DATA "14"
540 DATA "06"
550 DATA "30"
560 DATA "255"
570 DATA "205"
580 DATA "05"
590 DATA "00"
600 DATA "254"
610 DATA "03"
620 DATA "194"
630 DATA "17"
640 DATA "01"
650 DATA "195"
660 DATA "00"
670 DATA "00"
680 DATA "END"
```

Communication Errors (From Epson America, Inc. documents)

Transferring serial data from the PX to a printer, modem or another computer can often be complicated by communications errors. Most errors will have a tell-tale set of clues revealing the source of the problem.

Symptom: Every letter garbled

This is usually caused by baud rate mismatch — one device is set at 1200 baud and the other at 300, for instance.

Symptom: Received characters are graphics or Italics

This is commonly a result of word size mismatch. The sending device may be set up for a 7 bit word, and the receiver for 8 bits.

Symptom: About ½ of the characters are graphics or Italics

This is usually a parity mismatch, with one end set at even, and the other at odd or no parity, for instance.

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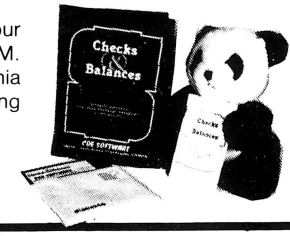

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Symptom: Occasional or intermittent loss of characters

This is related to faulty connections or electronic noise. Frequent causes are excessively long cables, excessive baud rates, dirty connectors, or transmitting over noisy phone lines.

Phone lines are not designed for data transmission. The frequent electronic noise encountered over standard lines can often cause data loss. Possible rectifications include lowering the baud rate, using Christiansen protocol (if possible), and using dedicated phone lines.

Symptom: Many paragraphs received correctly, then whole ones lost

This is the classic symptom of a handshaking problem. Make sure the sending and receiving device are using the same type of handshaking. For example, one device cannot use a hardware handshake and the other use the X-on/X-off variety. If both devices are using a hardware handshake, check wiring of the handshake lines like DTR or RTS.

Symptom: No data received at all

This may be caused by faulty wiring or incorrect word size. Since it is quicker and easier to check on word size, do this first before jumping to conclusions about wiring difficulties.

In all cases, don't overlook the obvious. Is your modem turned on or even plugged in? Are all cables securely fastened? Are the proper cables being used? Is the printer in its 'Online' mode. Is it out of paper?

Cables

The following Epson Cables are used with the Portables:

#702 - Connects the HX-20 to an audio cassette
#706 - Connects the HX-20 to a modem
#707 - Connects the HX-20 to the TF-20 disk drive
#715 - Connects the HX-20 to a serial printer
#716 - Connects the HX-20 RS232 to HX-20 RS232
#717 - Connects the HX-20 serial to HX-20 serial
#723 - Connects the Geneva to the P-80 printer
#724 - Connects the Geneva to the CX-20 or modem
#725 - Connects the Geneva to a printer/computer
#726 - Connects the Geneva to the PF-10 or another PX-8

Internal Modem Programming Documentation

Copies of the 11 page document PRGINT.DOC, which details the programming procedures necessary to access the PX-8's internal modem, may be obtained from the EpsonConnection. Please send $2.00 to cover postage and handling.

Notes on New PX Operating System

The operating system on the Geneva PX-8 was upgraded by Epson America this past fall. This new chip allows access to the "I" drive in the Multi-Function Unit (MFU). Another feature included is a safety feature for microcassette tape operations. When you do an initialization of the directory of a tape, it will ask if you are sure first. Any Geneva computer with a serial number starting with 2 or greater has this chip already installed. If you need it, contact your dealer for installation. ■

We would like to encourage all users to send in tips to share with each other in this column.

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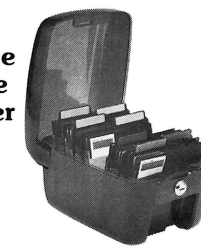

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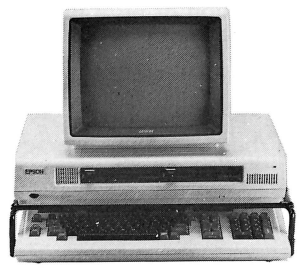
Perfect Epson Stand



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Public Domain Pak

The Free Software Handbook is chock full of documentation, reviews, and commentary on the use and abuse of the best 70 CP/M public domain programs. It might cost a dedicated hacker hundreds of hours and maybe thousands of dollars to track down this box full of goodies. Super CP/M utilities like Unerase, D.Com, and RPIP are here. This bundle of free software includes Bio.Com, Wumpus.Com, Adventure.Com, Food.Com, and dozens of other popular programs too.

If you want to share in the free software bonanza but don't have the time to search through piles of useless software to find a few precious gems, this book is for you. The list price of *The Free Software Handbook* is $17.95. Central's price is $15.95. However, QX-10 users can now get both *The Free Software Handbook* and all 70 programs reviewed in the book for $49. Save yourself the expense, and time and effort of compiling these programs. Order the *Free Software Handbook* and companion programs today.

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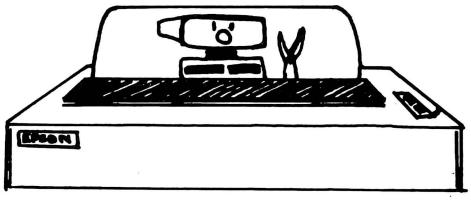
User Tip - Epson Printer Summary

by Will Jackson

The default print style for the Epson printer is the PICA style, which prints at 10 characters per inch and provides 80 characters on the standard 8½ inch paper. The other options are variations on this style through different compression, expansion or print quality modes. These and other features are obtained by sending a command to the printer through various program approaches or by direct command under the proper situation. The various models of the Epson dot matrix printers have different capabilities but most of the print style commands are the same for the MX, RX and FX models. The following summary covers some of these, for full coverage see the respective manual for each model:

Action		Directed Code	MBasic Code
Elite On		Mar Rel M	CHR$(27)"M"
Elite Off		Mar Rel P	CHR$(27)"P"
(Note: Elite is not available on the MX printer.)			
Compressed On		Ctrl o	CHR$(15)
Compressed Off		Ctrl r	CHR$(18)
(Note: Mar Rel is the ESCAPE key or ESC in the following and Crtl is the Control key or A.)			
Expanded On		ESC W1	CHR$(27)"W1"
Expanded Off		ESC W0	CHR$(27)"W0"
(Note: RX & MX printers use ESC W, see manual.)			
Emphasized On		ESC E	CHR$(27)"E"
Emphasized Off		ESC F	CHR$(27)"F"
(Note: Emphasized is accomplished by a slight horizontal shift of the print head and a second strike over; this is Letter Quality under VALDOCS.)			
Double-Strike On		ESC G	CHR$(27)"G"
Double-Strike Off		ESC H	CHR$(27)"H"
(Note: Double-Strike is accomplished by a slight vertical shift of the print head and a second strike over. It is the same as BOLD under VALDOCS.)			
Superscript On:	FX	ESC S1	CHR$(27)"S1"
Subscript On:	FX	ESC S0	CHR$(27)"S0"
Sup/Sub On:	RX & MX	ESC S	CHR$(27)"S"
Script Off		ESC T	CHR$(27)"T"
Italics On		ESC 4	CHR$(27)"4"
Italics Off		ESC 5	CHR$(27)"5"
Master Reset		ESC @	CHR$(27)"@"
(Note: This resets the printer to default mode.)			
Proportional On		ESC p1	CHR$(27)"p1"
Proportional Off		ESC p0	CHR$(27)"p0"
(Note: This is available only on the FX model.)			
Underline On:	FX	ESC -1	CHR$(27)"-1"
	RX & MX	ESC -	CHR$(27)"-"
Underline Off:	FX	ESC -0	CHR$(27)"-0"
	RX & MX	Use master reset.	



As can be seen, there are some differences between the printers. Other makes would have yet other commands. There are also different codes for some actions depending on the make of the computer. The best plan is to study the manuals and try a few of the examples.

Editorial Note: We are frequently asked, "How do you send printer control codes to a printer?" There are various methods available, and we will outline some of them here.

The most common method is to use a utility program which you run separately, select the typestyle you want sent to the printer from a menu, and then return to the work you want printed out. There are several public domain printer programs available: Printer.sys or .com, epsonset.com, fxprint.com, rxprint.com. These programs can be found on many of the online bulletin boards, and on public domain disks.

Another way is to send the codes directly from MBASIC to the printer. MBASIC comes with the QX-10 and Geneva PX-8. You must go into Basic, and at the OK prompt, type **LPRINT CHR$(15)<CR>** to set the Condensed Mode to your printer. See your printer manual or the codes mentioned in this User Tip article.

Another way is to directly set the typestyles from your application program, as with the OUT command through PeachText. Not all programs will allow you to send control codes directly however, which is why the public domain programs are so convenient. ■

#5 Tape of the Month

There is only one program on this month's tape, but it's a good one, the venerable **Star Trek** game, configured especially for the PX. Modification for the PX was done by Roy Goodloe of Epson America Southwest.

We are currently working on adapting PX programs from a Japanese publication, and will have some of these available for Tape of the Month selections in the near future.

ORDERING INFORMATION: To order TOM5, please send a check or money order for $10.00 to the EpsonConnection, Tape Service Department, P.O. Box 14027, Detroit MI 48214. Indicate that you desire **TOM5**.

•NOTICE•

In the February issue, page 41, the address for Computer Professionals should read : 305 Read Street, Portland ME, 04103.

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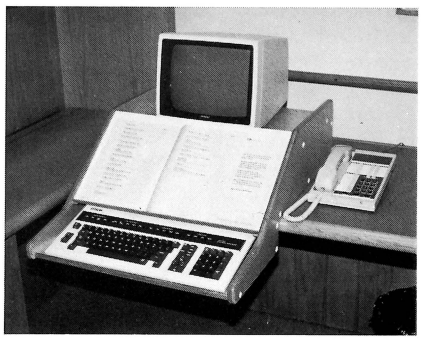

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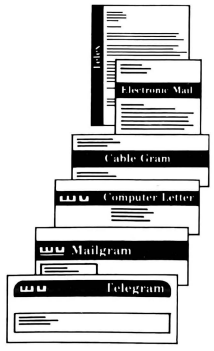

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Questions & Answers

Q: I am interested in a chess program and an adventure game. Any recommendations on software companies? Is there a list of all the software available and the companies which supply the software for the QX-10?

John Hill
Hendersonville, NC

A: *A chess game and an adventure game both accompany our November Disk-of-the-Month (EC-5). Our December 1984 issue is a resource catalog for the QX-10. This issue contains a comprehensive listing of hardware and software available for the Epson Computers. Both of these items may be purchased as back issues.*

Q: Will my Prometheus modem work correctly with Valdocs 2.0?

J. Francis McCarthy
Detroit, MI

A: *We have successfully operated the Prometheus modem with our test copy of Valdocs 2.0. We expect that 2.0 will be compatible with other Hayes compatible modems.*

Q: Do you have any material regarding the updated version of the QX-10 (QX-10+). I have used the Epson QX-10 with the Valdocs 1.18 Version. Has this version been updated since I received my QX-10? I have also used the Accounting Partner and Friday on the QX-10. Do you have any updates on these packages, especially any improvements? Finally, what spreadsheet package program would you recommend for the QX-10 or QX-10 plus?

Edward Mahoney
Warren, MI

A: *The QX-10 plus is simply a stock QX-10 that is sold with the QX-PC2 card from Titan Industries already installed. It also comes with the newer "Brother" keyboard. There are no other changes to it, thus, any standard QX-10 can be upgraded to a QX-10+. The latest version of Valdocs at this time is Version 1.19, which is the final release for the version 1 series, and should be available from your dealer. For update information regarding Friday! and the Accounting Partner, you will have to contact the manufacturer of the package. Undoubtedly, the most common spreadsheet used on the QX-10 is PeachCalc, by Peachtree Software. Other popular spreadsheets are Lotus 1-2-3 and MultiPlan by Microsoft. There are also dozens of spreadsheets that use the MS-DOS operating system for those who have the QX-PC2 card. Valdocs 2.0 will include an easy to use Spreadsheet for the QX-10 owner. A recommendation is difficult, like software, it depends on what you want to use it for.*

Q: Is there any way to retrieve a non-indexed temporary file which has no number from Valdocs?

Gerard Weber
Encino, CA

A: *Yes. From Valdocs, press CTRL-Q, then select <R>etrieve non-indexed file. Then, enter the filename of the file as it looks on a directory display.*

Q: Have you heard of a program for the HX-20 which will monitor the battery life or state of remaining charge?

Donald O'Toole
Topeka, KS

A: *We know of no such program for the HX-20. However, contrary to popular belief (and the instruction manual), the HX-20 may be operated while being charged. However, charging the battery while the HX-20 is in use makes it difficult to determine when it has been fully charged. The recommended charge time should be no less than 8 hrs. and not in excess of 14 hrs. Over charging will damage the batteries.*

Q: Whenever I call an EpsonNet RBBS/RTPM, my screen always gets cluttered up whenever the host system sends any reverse video characters. It also will go into a frantic flashing spasm for a few brief seconds until my screen scrolls past the characters where the flashing started. Is this typical for these BBS's, or am I improperly setting my terminal program characteristics?

A: *More than likely, you are using a modem program on a CP/M operating system. All EpsonNet BBS's operate on the TPM operating system. These two operating systems do not use the same screen codes for some screen functions, therefore, when the TPM BBS sends a reverse video code, CP/M on your end misinterprets the code and displays gibberish on your screen. If possible, call the BBS's using Valdocs Mail, or use any of the Modem 7 series programs under TPM.*

Q: I would like to add an 8 inch standard CP/M format disk to my Epson. I understand that CP/M will support up to 16 disk drives but I am wondering if the software is already capable of additional disk drives or if a patch would be needed to be added. Also how does one find out the address to assign if an additional disk is to be added.

Lawrence Fetter
Hutchinson, KS

A: *We are not aware of any company that produces 8 inch drives for the QX-10. Epson does produce a TF-20 twin 5¼ inch disk drive unit. The most logical alternative currently available is a hard drive. Perhaps an innovative dealer or user can come to the rescue here.*

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